

CIS 5.0 User Guide

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1 Introduction

The CIS software is a tool that manages the assessment and results of a skills competition. It is used to create or import marking schemes, generate marking forms, and record or calculate assessment information for each Competitor. It ensures that marks conform to pre-defined rules for each competition. It calculates all results for every competition, lists all medal winners, and can also generate overall results for each Member organisation. There are also many reporting and analysis tools available.

The CIS software acts as a server that users can connect to via a web browser either on a computer or mobile device.

2 Installation

WorldSkills International provides CIS installation packages for both Windows and Linux operating systems. All of the installation packages include a Java installation, so pre-installing Java is not necessary.

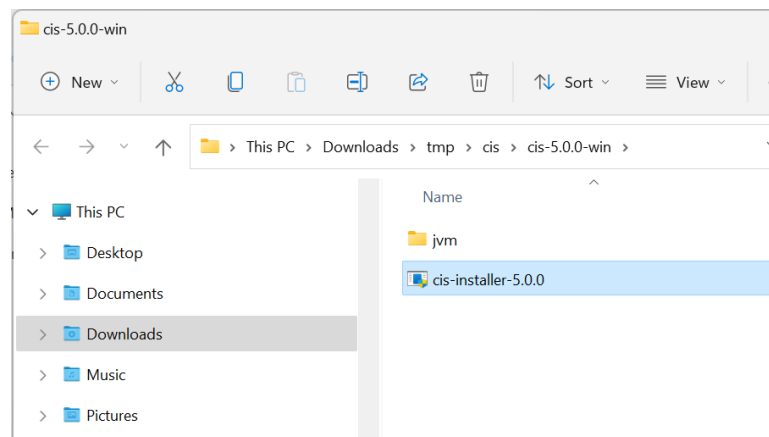
2.1 Windows Installation

2.1.1 Download Installer Package

The Windows installer is available from <https://cis.worldskills.org> and comes bundled with a JVM, so Java does not need to be installed separately.

2.1.2 Start Installation

Unzip the windows installation file, then double click on the installer executable file.



2.1.3 Microsoft Defender Warning

Windows may show a warning message, stating that the application is from an unrecognised publisher.



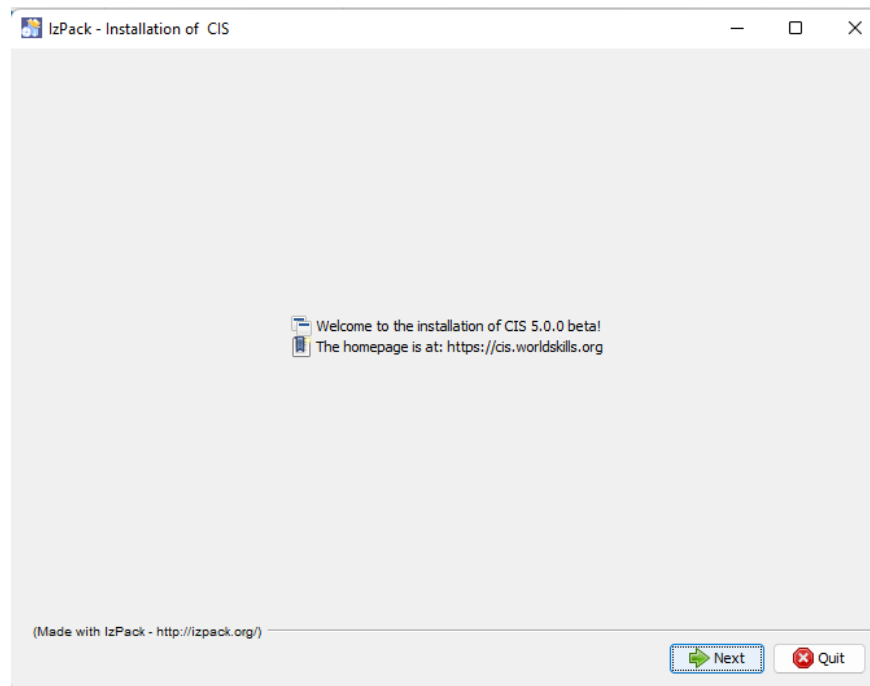
Click the “More info” link and to see the publisher information and verify that it has come from WorldSkills International.



Click the “Run anyway” button to start the installer.

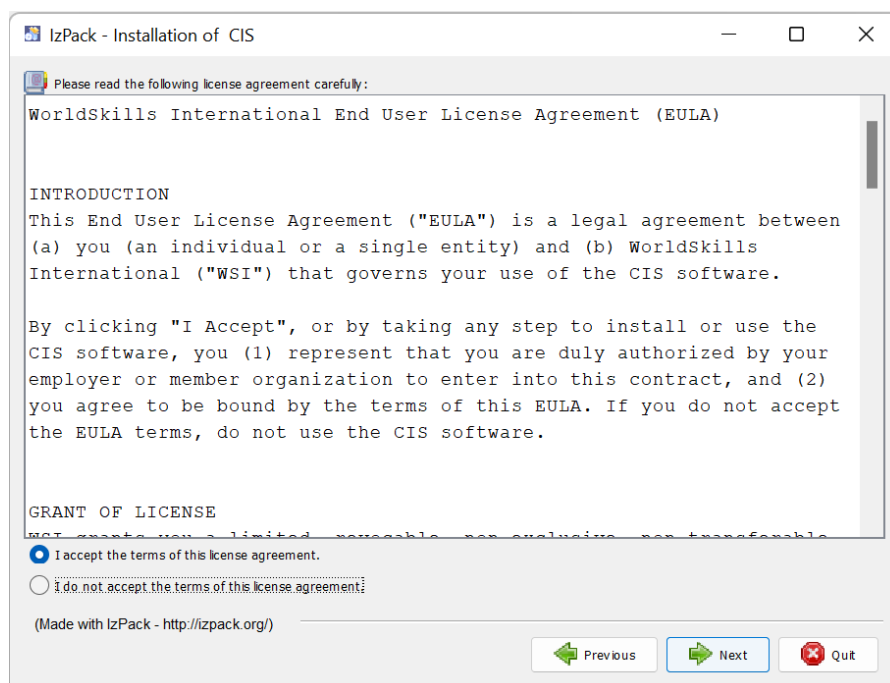
2.1.4 Welcome Screen

You will be presented with the CIS installation welcome screen



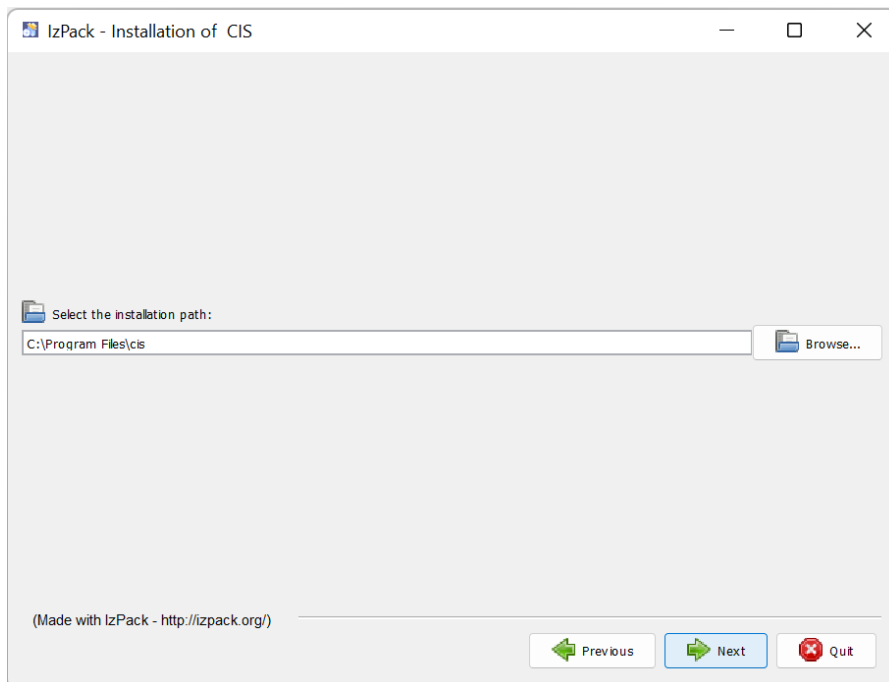
2.1.5 End User License Agreement

Please read through the End User License Agreement before accepting the terms and continuing with the installation.



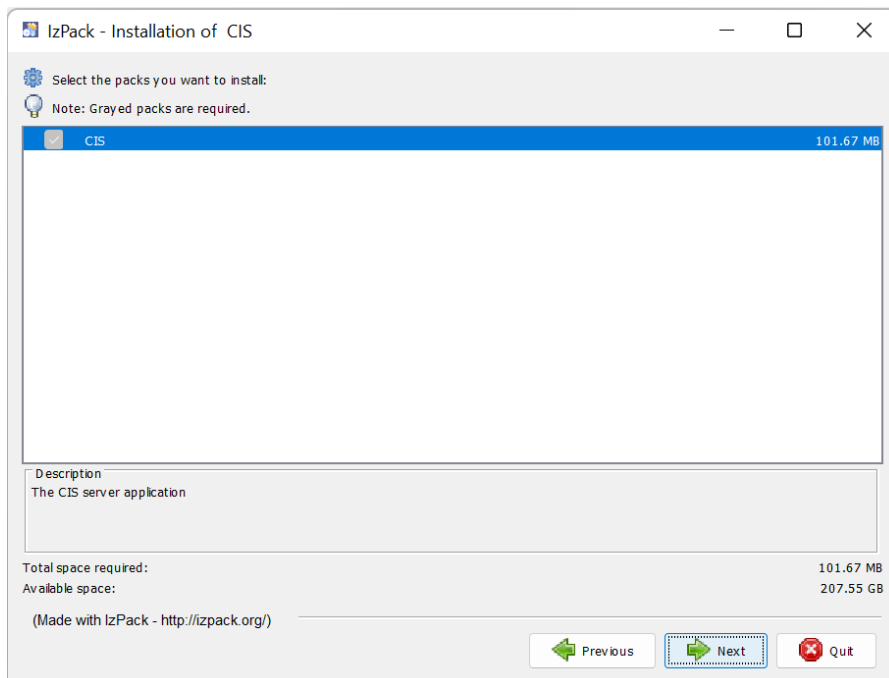
2.1.6 Choose Installation Path

Select a destination to install the CIS software.



2.1.7 Installation Packs

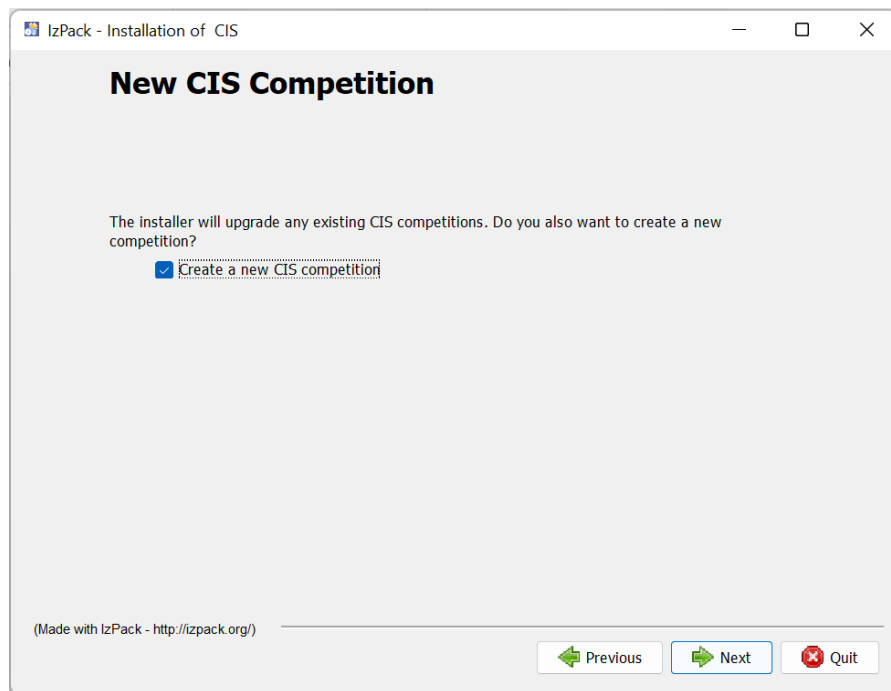
Only the CIS installation pack is available, and this pack is mandatory.



2.1.8 New CIS Competition

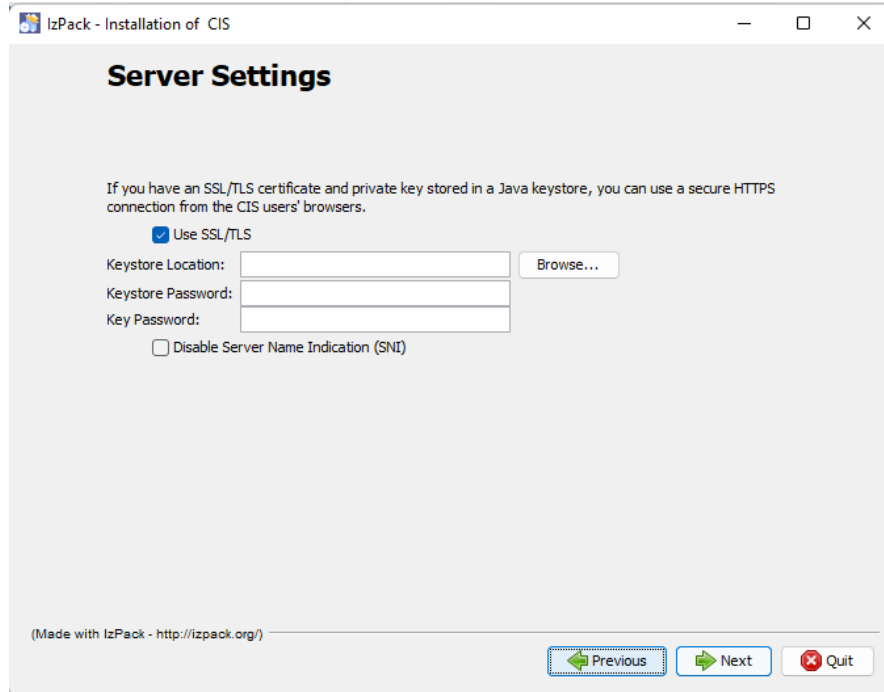
At this step you are selecting whether to create a new competition in the CIS installation or simply upgrade an existing installation of CIS. You can have multiple CIS competitions within the one installation. Each competition has its own URL.

On this screen if you wish to upgrade an existing installation without adding any new competitions or changing any settings, simply uncheck the checkbox and press the “Next” button. You will skip to step [2.1.13](#).



2.1.9 Server Settings

This screen provides the option of supplying an SSL/TLS certificate to create a secure HTTPS connection between the user's browser and the CIS. The certificate must be stored in a Java keystore in order for the CIS to be able to read it.

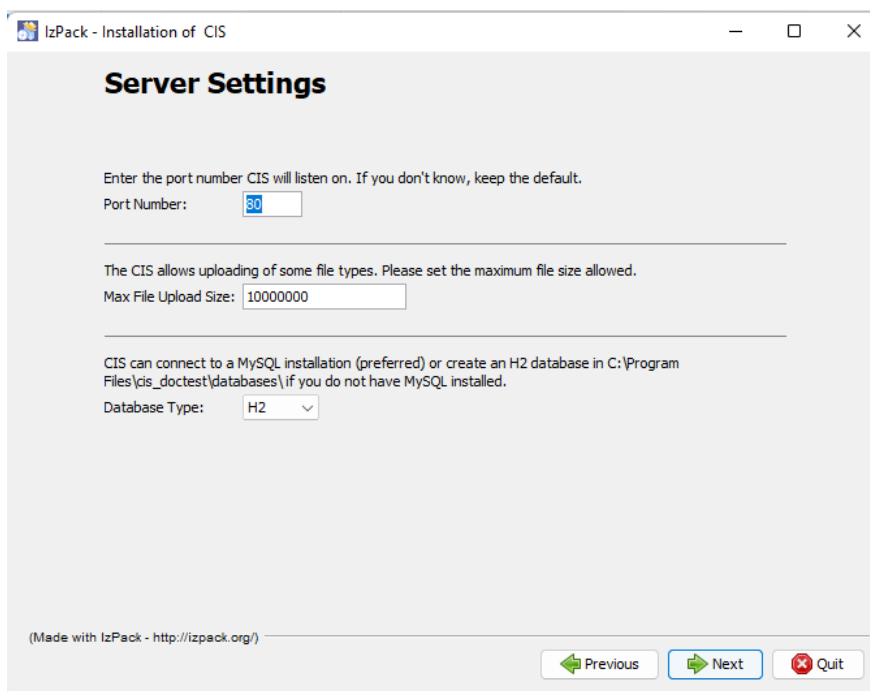


When the "Use SSL/TLS" checkbox is ticked the keystore fields are revealed. The "Keystore Location" is the path to the Java keystore containing the SSL/TLS certificate.

The "Disable Server Name Indication (SNI)" setting will turn off support for Server Name Indication from within CIS.

2.1.10 Server Settings

This screen sets port the CIS server will listen on for incoming requests from the users' web browser. The default for a Windows installation is set to port 80, which is the standard HTTP port used for serving web pages over an unencrypted connection. You may find that other software installed on your machine such as Apache, IIS or even Skype will attempt to use port 80 and cause problems for CIS when it starts up. If this is the case, you can either simply not run the other software, re-configure it to use a different port, or configure CIS to use a different port.

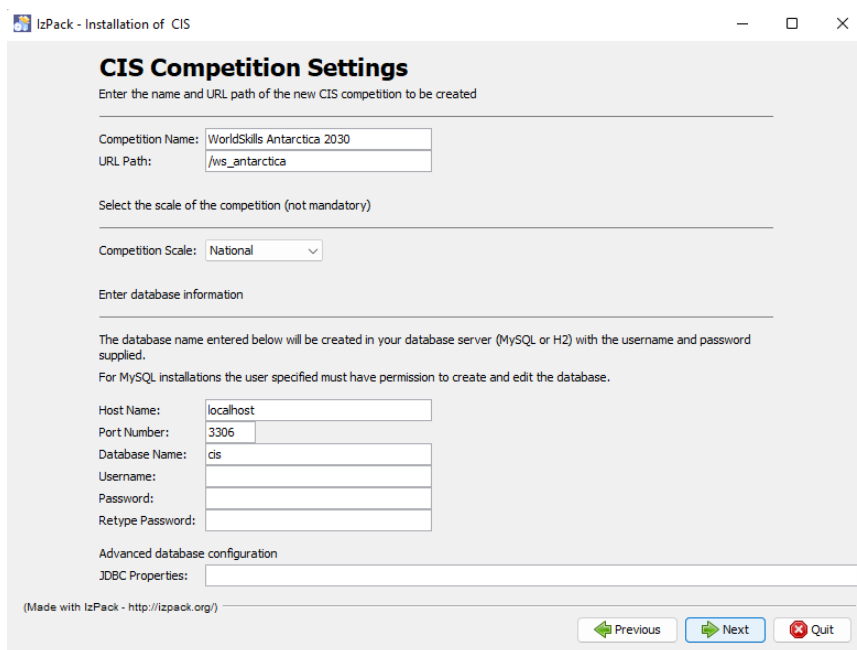


The "Max File Upload Size" sets the largest file size that can be uploaded to CIS in bytes. The default size is set to 10MB.

This screen also prompts the user to select a database type to hold the data for the CIS competition. The default database type is H2, which is a lightweight Java database that will create a file in the "database" directory of the CIS installation folder. Alternatively, an existing MySQL installation can be selected to contain the new database.

2.1.11 Competition Settings

This screen provides fields for some of the basic settings of the new competition



Competition Name – This name appears on the top of every page, the login screen and at the top of every PDF generated by the CIS.

URL Path – Each CIS competition is accessed by users at a different URL. The part entered here comes after the machine name/address. For example, if the CIS screenshot above were being installed on the WorldSkills International server it would be accessed at http://www.worldskills.org/ws_antarctica

Competition Scale – If the installation is permitted to share usage information with WorldSkills International (see section [2.1.13](#)) this selection is sent to the server. This helps WorldSkills International measure impact.

Host Name (MySQL only) – This is the host name of the computer where MySQL is installed. If it is installed on the same machine as the one CIS is being installed on, then it can be left at the default name of localhost. If MySQL is on a different machine, enter the host name or IP address of that machine. If the H2 database were selected in the previous step this field will not appear.

Port Number (MySQL only) – This is the port number that the MySQL database is listening on. In most cases this will be the standard MySQL port 3306.

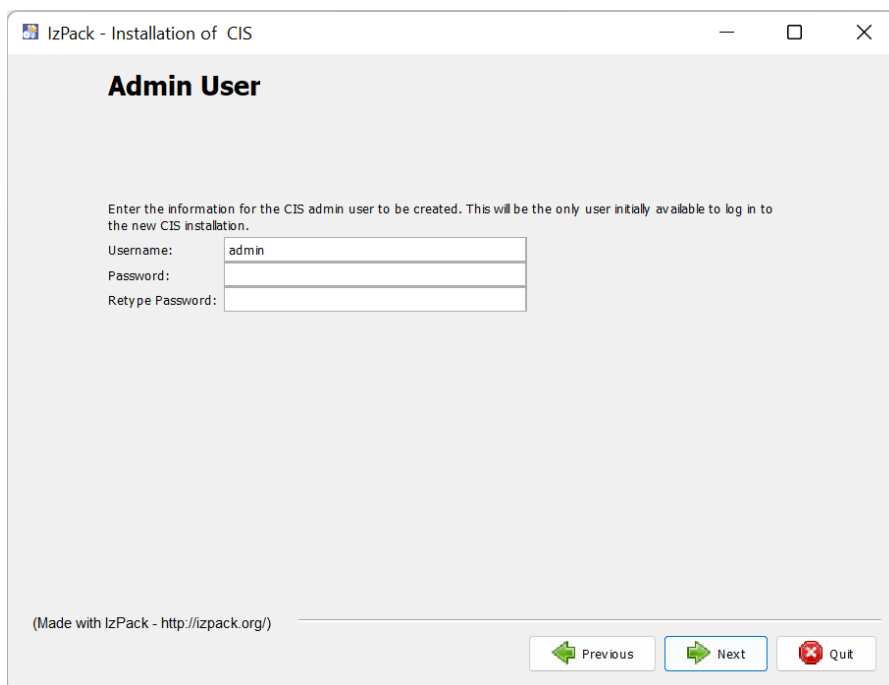
Database Name – This is the name of the database that the new CIS competition will use. If the database doesn't exist, then it will be created. If it does exist, then it must be empty.

Username & Password fields – This is the username and password of the database user that will access the CIS database. For MySQL installations the user must already exist and have full permission to create and edit the database. For H2 installations these details will be used to create a new user to access the new database that will be created.

JDBC Properties (MySQL only) – This is for setting advanced database connection parameters for situations that aren't covered by the default CIS settings. For example, for some MySQL 8 databases the parameter `allowPublicKeyRetrieval=true` may be required.

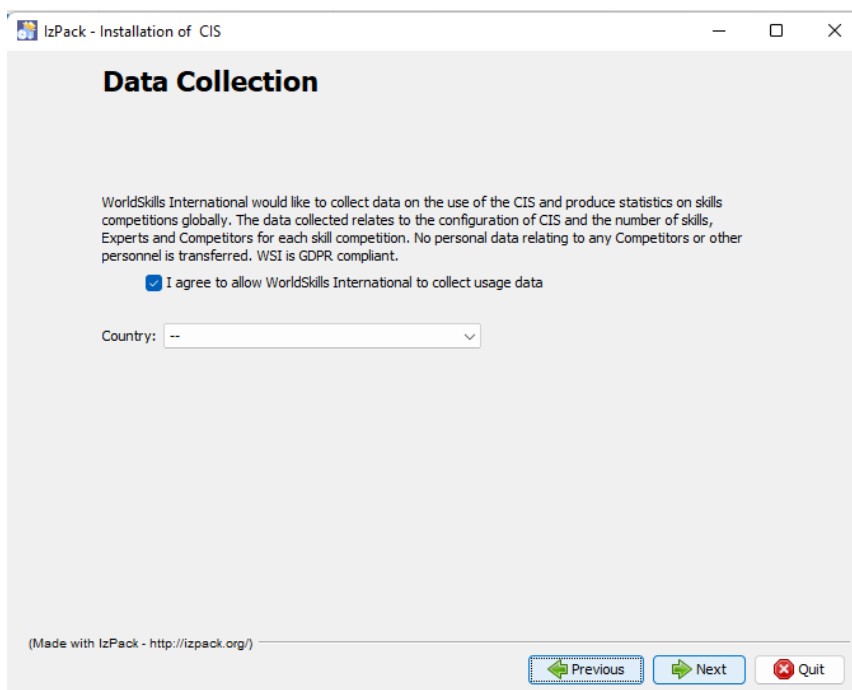
2.1.12 Admin User

This screen prompts for the username and password of the admin user that will be created for the competition. This will be the only user that exists once the installation is complete. The admin user will have full control over the CIS competition. It is recommended that you write down the username and password and keep it in a secure location.



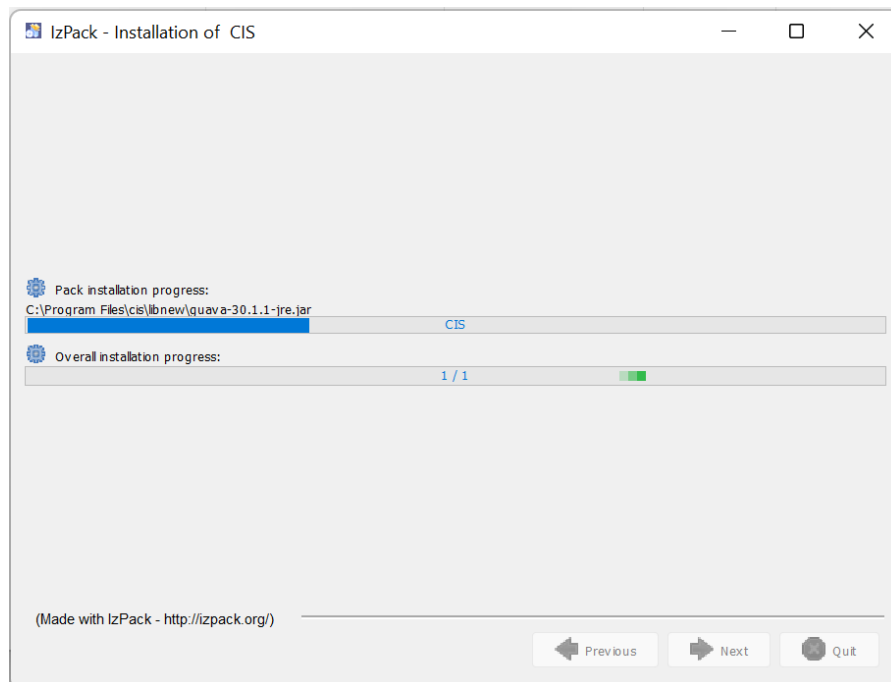
2.1.13 Data Collection

This screen asks for permission to send some basic usage data back to WorldSkills International at a few key points during the competition lifecycle. This includes data such as the number of skills, the number of Competitors, and so on. No personal data of any kind is sent. This data helps WorldSkills International to measure its impact.



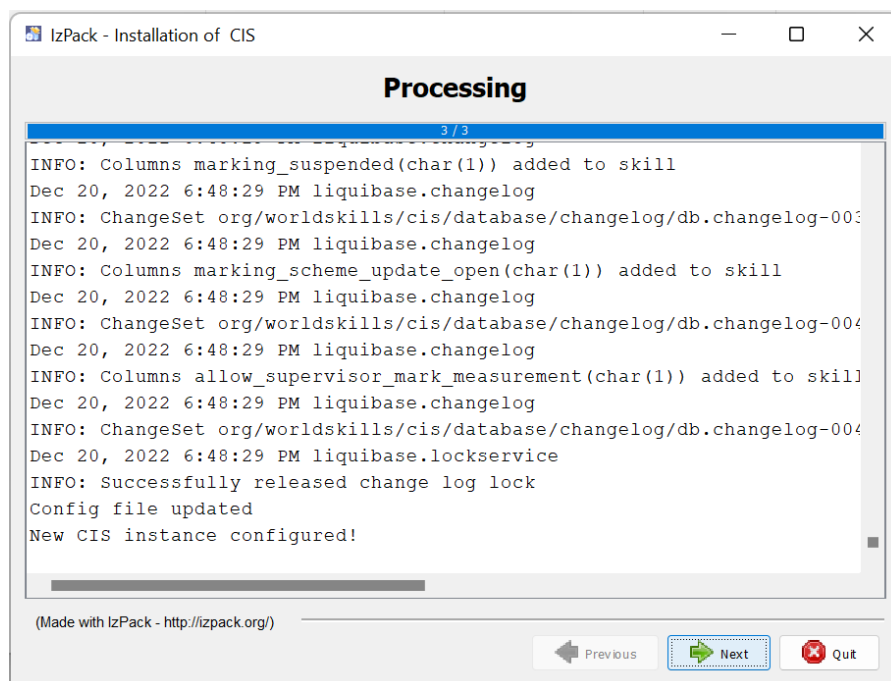
2.1.14 Installation

This screen shows the progress of transferring files to the installation folder.



2.1.15 Processing

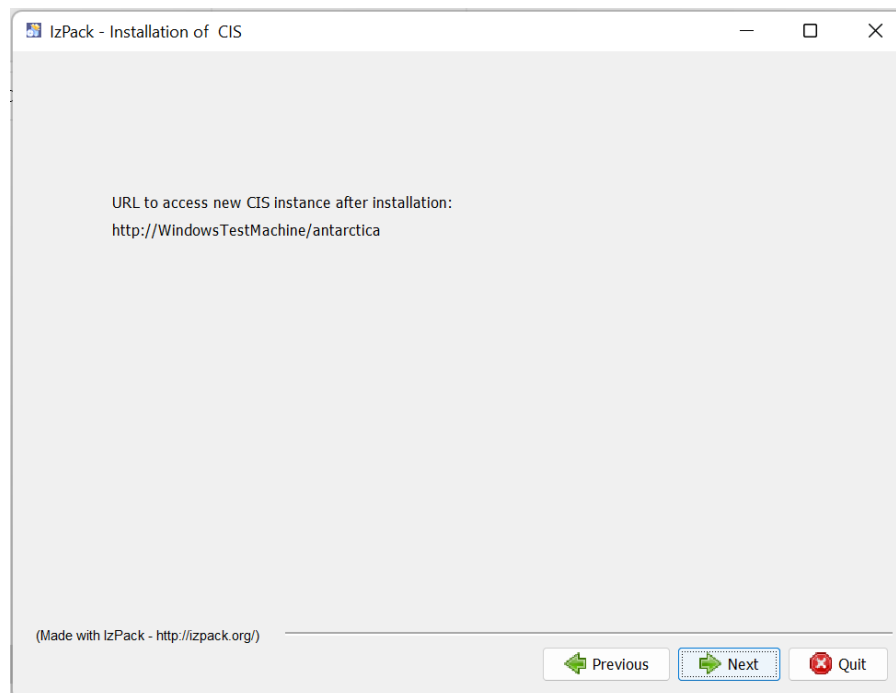
During this step the new database is created and the configuration file is created or updated.



2.1.16 Competition URL

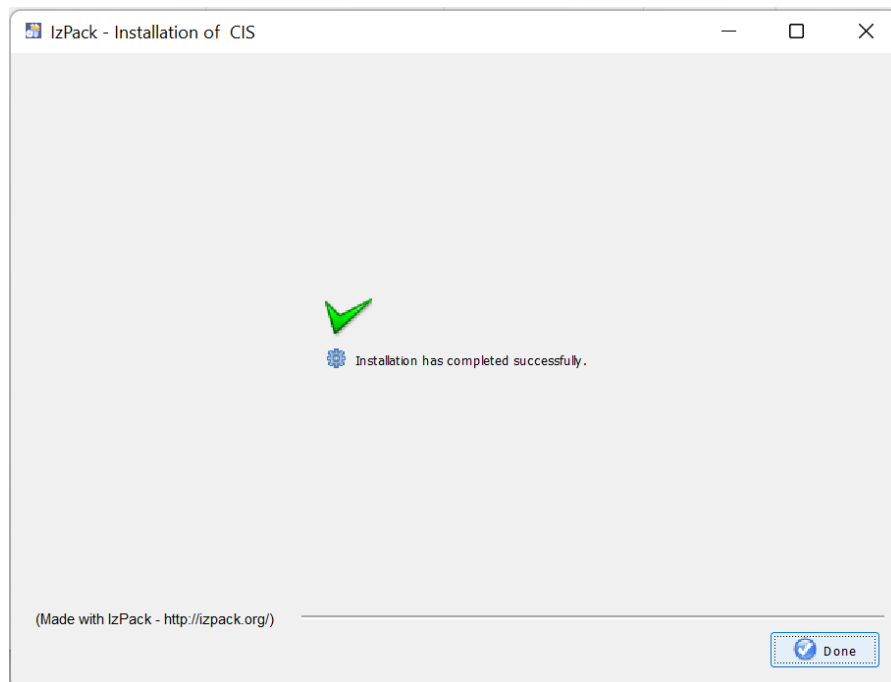
This screen shows a URL from which you can access the new CIS competition once the CIS server has been started. You will note that it is your machine name with the URL Path that you supplied in step [2.1.11](#) appended. After you start the CIS server you can type this into your web browser and you will see the CIS login screen.

The CIS competition can also be accessed using the IP address of the machine, for example <http://192.168.0.1/antarctica>. Depending on the network configuration there may also be other names mapped to the machine. For example, a domain name could be configured to point to the machine, so <http://www.yourdomain.com/antarctica> could also point to CIS.



2.1.17 Installation Complete

This is the final screen of the installation process.



2.2 Linux Installation

2.2.1 Linux Installer Versions

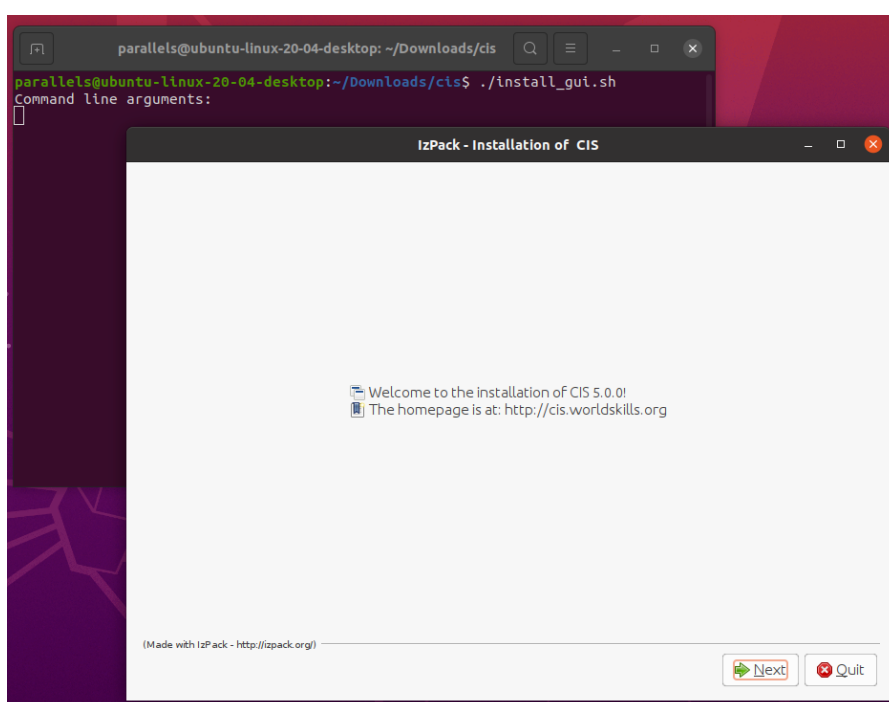
There are two options for Linux installation – the x64 version for Intel processor machines and the AArch64 version that supports machines that have an ARM processor architecture.

2.2.2 Unpack the Installer

The installers are distributed in a zip file. Unpack the zip file to get access to the installation scripts.

2.2.3 GUI Installation

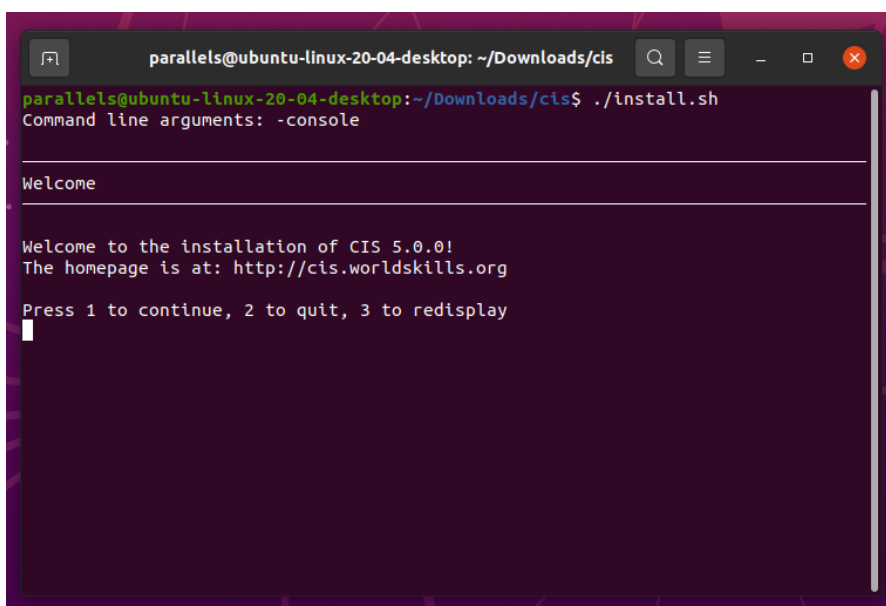
If a desktop environment like GNOME or KDE is installed then a GUI installer can be used that is very similar to the one used for Windows installations. To use this installer, simply run the `install_gui.sh` script.



See the Windows installation documentation above for the data required at each step. The Linux installer differs in that it does not show the "Processing" screen at 2.1.13 because it does the processing in the background.

2.2.4 Command Line Installation

The CIS software can also be installed via the command line. To use this installer, run the `install.sh` script.



```
parallels@ubuntu-linux-20-04-desktop: ~/Downloads/cis
parallels@ubuntu-linux-20-04-desktop:~/Downloads/cis$ ./install.sh
Command line arguments: -console

Welcome

Welcome to the installation of CIS 5.0.0!
The homepage is at: http://cis.worldskills.org

Press 1 to continue, 2 to quit, 3 to redisplay
█
```

The installer will ask for the same information as the Windows installer, so the above documentation can be used as a guide.

2.2.5 Installation Path

The installation path on Linux cannot have any spaces in it. If any of the folder names in the path have a space in it the installation will fail.

2.2.6 Ports on Linux

On Linux systems TCP ports with numbers less than 1024 are reserved and can only be opened by the root user. This will cause problems trying to run CIS on the default HTTP port 80 or HTTPS port of 443. The CIS installer suggests that you pick the port 8080, but any port above 1024 will work as long as it doesn't conflict with another application. Because a port other than port 80 will be used it will mean that the port number will need to be put in the URL when accessing CIS, for example <http://localhost:8080/antarctica>

It is still possible to have URLs without the port number in them by redirecting traffic from port 80 to the port that the CIS is listening on, for example by using a reverse proxy or configuring port forwarding.

2.3 Upgrading an Existing Installation

Before upgrading an installation of CIS it is advised to make a backup of the existing competition databases.

To upgrade an existing installation run the installer for the latest version of CIS. Select the path of the existing installation as the installation path in the new installer. The installer will detect that the path contains an existing installation of CIS and upgrade the installation. Also remember to uncheck the “Create new instance” checkbox in step 2.1.6 above so that it doesn’t add another competition to your installation.

2.3.1 New Permissions

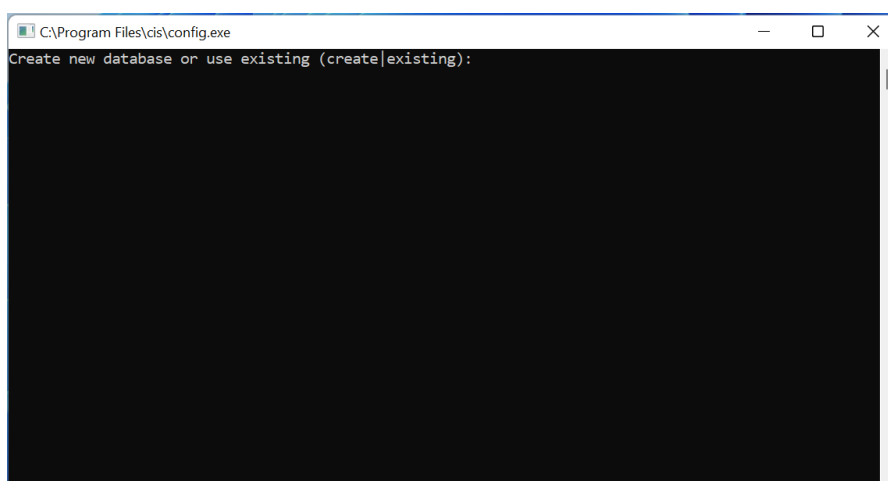
Some upgrades may introduce new permissions to CIS or modify existing ones. If there is a feature missing from CIS that was expected, first check the permissions to make sure users have access to the new feature.

2.4 Adding Another Competition

The CIS software can run multiple competitions from a single installation. A new competition can be added to the installation by running the `config.exe` utility (or `config.sh` on Linux) located in the installation directory.

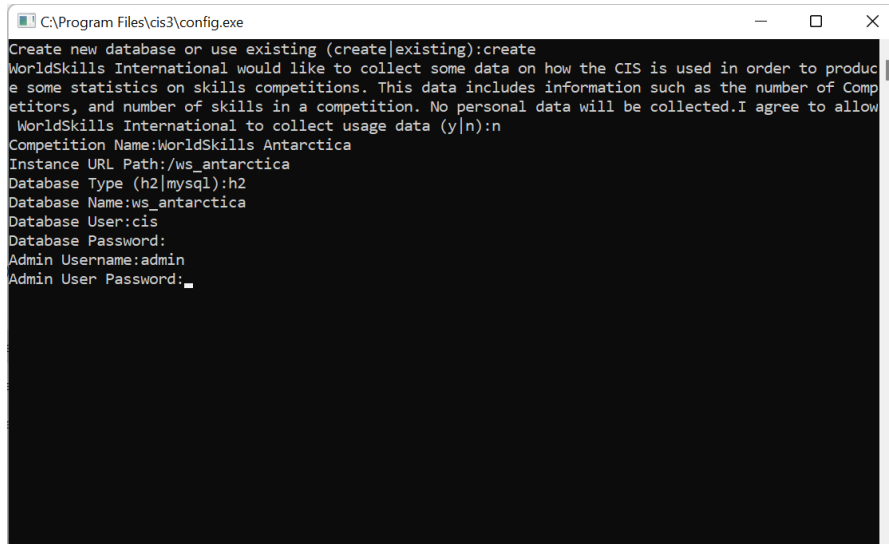
2.4.1 New Database or Existing Database

The config utility can create a new competition database or can add an existing competition database to the CIS installation. When an existing competition database is added, the CIS configuration file is updated but no operations are performed on the database itself, so it is important to ensure that database has come from a CIS installation that is running the same version of CIS.



2.4.2 Configuration Details

The utility will prompt for details needed add the new competition to the CIS installation. The information requested is similar to that requested during the installation process. Refer to the Windows installation procedure for further details on a specific item.



```
C:\Program Files\cis3\config.exe
Create new database or use existing (create|existing):create
WorldSkills International would like to collect some data on how the CIS is used in order to produce some statistics on skills competitions. This data includes information such as the number of Competitors, and number of skills in a competition. No personal data will be collected. I agree to allow WorldSkills International to collect usage data (y|n):n
Competition Name:WorldSkills Antarctica
Instance URL Path:/ws_antarctica
Database Type (h2|mysql):h2
Database Name:ws_antarctica
Database User:cis
Database Password:
Admin Username:admin
Admin User Password:█
```

2.5 Configuration File

The CIS server configuration is located in the `cisconfig.xml` file. This should only need to be modified in rare situations, for example changing the port that the CIS server listens on.

Below is an example `cisconfig.xml` file:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<CISConfig>
  <CollectData>true</CollectData>
  <Server>
    <Key>039c445f-8444-40a2-b0a1-e27736a4d45b</Key>
    <Port>443</Port>
    <SSL>
      <Keystore>C:\cis\keystore.jks</Keystore>
      <KeystorePassword>asFjP2z5zwvITH</KeystorePassword>
      <KeyPassword>asFjP2z5zwvITH</KeyPassword>
      <DisableSNI>>false</DisableSNI>
    </SSL>
    <Timeout>30</Timeout>
    <MaxUpload>10000000</MaxUpload>
    <Version>5.0.0</Version>
    <Build>835</Build>
    <Shutdown>
      <Port>8005</Port>
      <Message>shutdownCIS</Message>
    </Shutdown>
  </Server>
  <Instance>
    <Name>WorldSkills Antarctica</Name>
    <ContextPath>/ws_antarctica</ContextPath>
    <Database>
      <Type>h2</Type>
      <DatabaseName>ws_antarctica</DatabaseName>
      <Username>cis</Username>
      <Password>123456</Password>
      <UseSSL>>false</UseSSL>
    </Database>
  </Instance>
</CISConfig>
```

2.5.1 CollectData

This parameter determines whether to send basic usage data to WorldSkills International. No personal data is transferred. This parameter can be set to `true` or `false`.

2.5.2 Port

The `Port` parameter within the `Server` section defines the port that the CIS server listens to for incoming connections from the users' web browsers. Port 80 is the standard HTTP port and port 443 is the standard HTTPS port.

2.5.3 SSL Configuration

This section contains information needed for the CIS to serve secure, encrypted connections over HTTPS, including the location of the Java keystore, passwords for the keystore and certificate, and whether to disable Server Name Indication.

2.5.4 Timeout

This defines the number of minutes that a user can be inactive in CIS before their session is terminated and they are logged out. If not defined, the default timeout is 30 minutes.

2.5.5 MaxUpload

The maximum size of a file that can be uploaded to the CIS. The figure defines the file size in bytes.

2.5.6 Shutdown Configuration

The CIS should always be shut down using the shutdown script rather than just killing the running CIS process or closing the CIS console window. This allows the CIS to gracefully stop all the user sessions in each competition and clean up any locks held by the users.

The shutdown script works by connecting to a special port that CIS is listening on and sending it a shutdown message. The CIS will only accept connections on that port that originate from the same machine. Any attempt to connect to it from another machine will be rejected.

This section of the configuration file allows you to change the default shutdown port and the message that is sent to CIS.

2.5.7 Instance Configuration

Each of the competitions in the CIS installation is represented by an `Instance` section. These settings can be changed if necessary. For example, the database password can be changed or if the database is moved to a different server the details of the new location can be entered so that the CIS can connect to it. The URL path for the instance can be changed by modifying the value of the `ContextPath` parameter.

2.6 Other Server Options

To allow some of the standard JVM options to be set the CIS provides a separate file in the installation folder.

2.6.1 Windows Option File

The option file on Windows installations is named `startup.14j.ini`. Each option is put on a separate line. For example, the default maximum memory is set to 1000 MB with the line `-Xmx1000m`

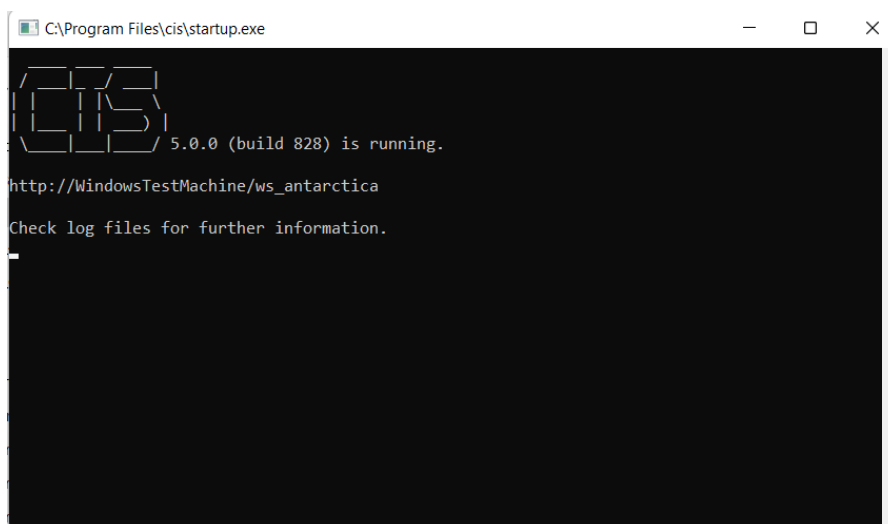
2.6.2 Linux Option File

The option file on Linux installations is named `jvm_params.sh`. The default maximum memory is set with the line `-Xmx1000m`.

3 Starting and Stopping CIS

3.1 Windows Startup

To start the CIS server, double click the `startup.exe` file in the installation folder. This will open a command window that will look like this after a few seconds:



This indicates that the CIS server has started successfully and is ready to accept connections from web browsers. It also lists the URLs of each competition that has been configured on the server.

3.2 Linux Startup

Installations on Linux should be started using the `startup.sh` script found in the installation directory. The same output as shown in the screenshot of the Windows startup above can be found in the `nohup.out` file.

3.3 Shutting Down CIS

The CIS server should always be shut down using the shutdown script. On Windows this is the `shutdown.exe` file in the installation directory. On Linux the `shutdown.sh` script found in the installation directory should be used.

Shutting down the server in this way allows CIS to gracefully invalidate the users' sessions and clean up any locks or other resources they may be holding. Just closing the CIS window or killing the process risks leaving the mark entry screen locked for some Competitors until the user who was entering the marks logs back in and goes the mark entry screen to reclaim the lock.

3.4 Log Files

The log files for CIS can be found in the `logs` folder within the installation directory. Each competition will have its own log file where any errors or warnings are logged. There is also a log file for the server itself called `server.rlog`.

3.5 Troubleshooting

3.5.1 Server won't start

On Windows if the server won't start you'll see the CIS windows briefly appear in the Windows task bar then disappear a few seconds later. On other operating systems you will see that there is no process running.

To find out what may be causing the problem, open the `server.rlog` file located in the "logs" folder of the installation directory. Most commonly you will be presented with a message such as the following:

```
2023-02-10 11:45:17.889::WARN: failed SocketConnector@0.0.0.0:80
java.net.BindException: Address already in use: JVM_Bind
```

This indicates that some other software installed on your machine is currently using the port that CIS has been configured to use, so CIS is unable to start. Webserver software such as Apache, IIS or Tomcat can often cause this conflict. To resolve the conflict you can either change the port that CIS NG uses (see section 2.6.1) or re-configure the other software that is using the port.

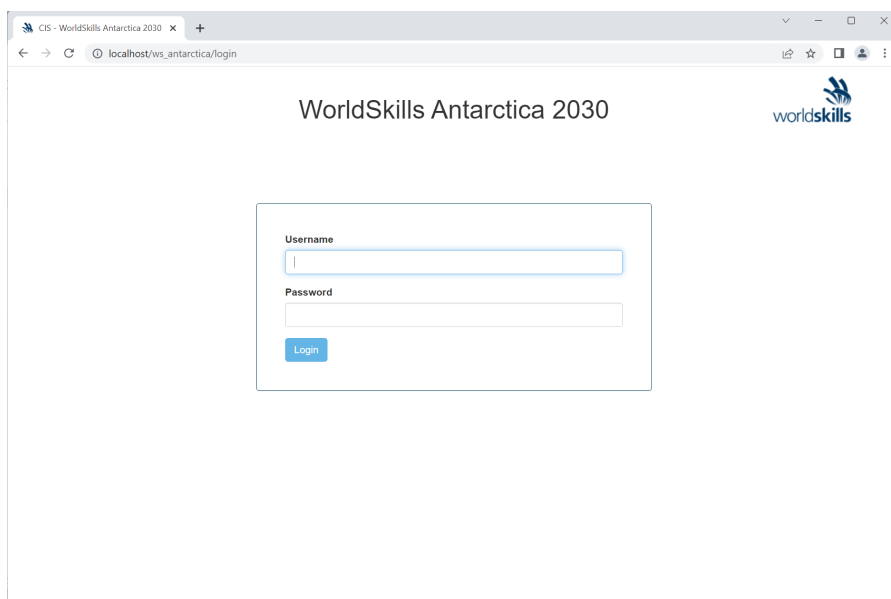
Another piece of software that causes problems in this regard is Skype. In previous versions of Skype it was possible to change the ports it used but as of the time of writing this is no longer possible, so Skype cannot be run at the same time as the CIS.

4 Setting up a Competition

4.1 Logging In

Once the CIS server has been started a user can go to the login screen with their web browser.

For example, using the data entered in the installation steps in section 2 the URL http://localhost/ws_antarctica produces the login screen below.



The screenshot shows a web browser window with the title 'CIS - WorldSkills Antarctica 2030'. The address bar shows 'localhost/ws_antarctica/login'. The main content area displays 'WorldSkills Antarctica 2030' at the top center, with the WorldSkills logo to its right. Below this, there is a login form with two input fields: 'Username' and 'Password'. A blue 'Login' button is positioned below the password field.

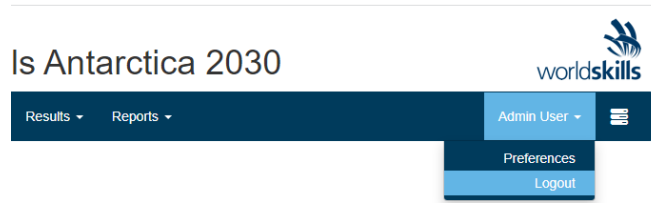
The competition name supplied during installation appears at the top of the screen.

The admin username and password that was provided during installation are used to create the initial user of the system. Enter the username and password and press enter or the login button to login to CIS.

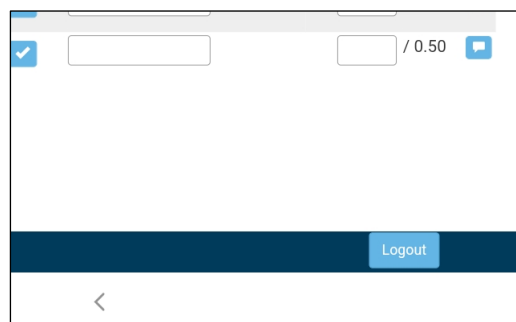
Each user of CIS can only have one active session at a time. If a person attempts to login with a user that has a currently active session, the active session is destroyed and the new session becomes the active one.

4.2 Logging Out

To logout of the system, a user should click on their name on the right of the menu bar. This reveals a dropdown menu, the last item of which is a logout link.

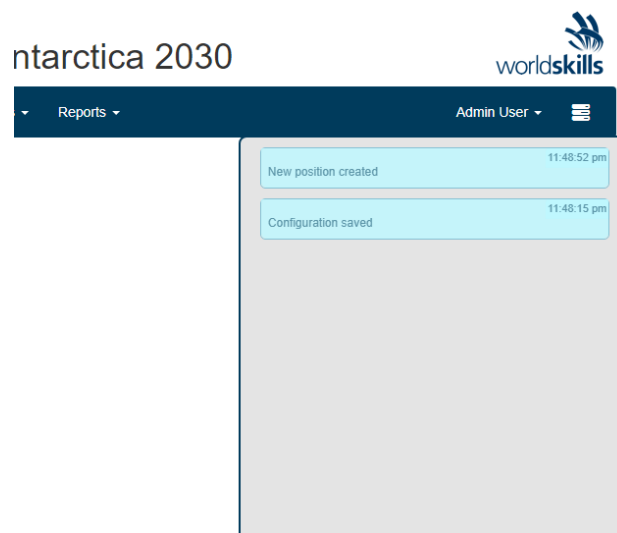


To logout from the tablet user interface, a user can click the "Logout" button in the bottom right corner.



4.3 Notifications History

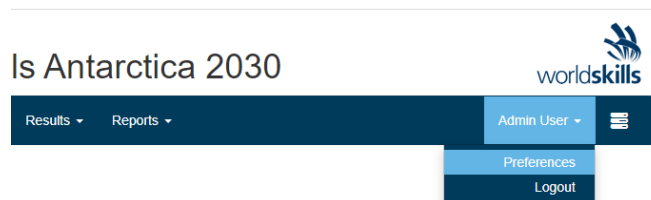
Clicking the icon on the far right of the menu opens the notifications history panel.



The panel displays the last ten notification messages.

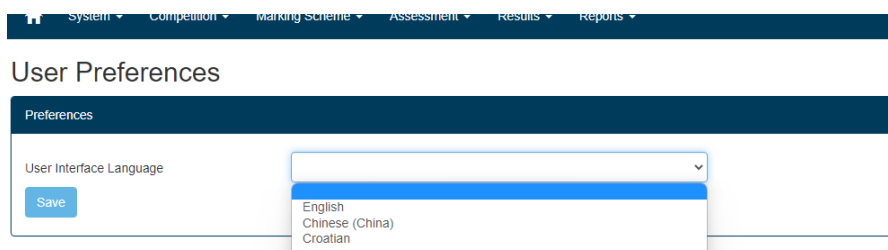
4.4 User Preferences

The user can set their preferences by clicking on their name on the right of the menu bar and selecting "Preferences" from the dropdown menu.



4.4.1 Setting Preferred Language

This first section of the preferences page allows the user to change the language of the CIS user interface.



4.4.2 Changing Password

The second section of the preferences page allows the user to change their password.

Change Password

Current Password

New Password

Confirm Password

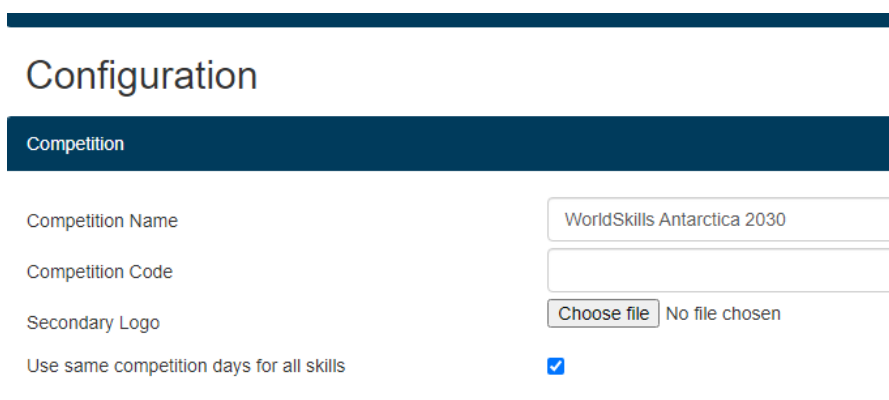
Save

4.5 Configuration Screen

The first item of the System menu is the Config screen.



4.5.1 Competition Configuration



The screenshot shows the 'Configuration' page with a 'Competition' section. It contains the following fields and controls:

- Competition Name:** A text input field containing 'WorldSkills Antarctica 2030'.
- Competition Code:** An empty text input field.
- Secondary Logo:** A file upload control with a 'Choose file' button and the text 'No file chosen'.
- Use same competition days for all skills:** A checkbox that is currently checked.

4.5.1.1 Competition Name

The name of the competition can be changed here. The change will be reflected in the generated PDFs, the header of the CIS user interface and the login page. The updated name will be shown when the user logs out.

4.5.1.2 Competition Code

This code will be added to filenames generated by CIS. For example, at a WorldSkills International event in 2028 the code "WSC2028" would be used.

4.5.1.3 Secondary Logo

To add a competition specific logo or some other branding, an image can be uploaded. The logo will be displayed in the user interface header on the left, on the top left in generated PDF documents, and on the login page. It is recommended to use a PNG or JPG file.

4.5.1.4 Same Competition Days for all Skills

This field determines whether all skills have the same set of competition days or whether each skill has a different starting date. The default is set to true.

4.5.2 Marking Configuration

Marking	
Maximum mark for an aspect	2
WSOS field in Aspects is mandatory	☐
Judgement Aspect benchmarks are mandatory	☒
Marking teams must be defined for each sub criterion	☐
Allow to set marking team size for each skill	☐
Hide Sub Criteria being marked on future days from desktop data entry interface	☐
Hide Sub Criteria being marked on future days from tablet marking interface	☐
Hide maximum mark of Aspects on marking forms where possible. This setting can also be set individually for each skill.	☐
Allow markers to take photos and upload images	☐
Maximum number of photos per sub criterion for each Competitor	4

4.5.2.1 Maximum Mark for an Aspect

Restricts the number of marks that can be assigned to a single aspect in the marking scheme. The default value is 2.

4.5.2.2 WSOS field in Aspects is Mandatory

This determines whether WorldSkills Occupational Standards should be linked to each aspect in the marking scheme. The default value is false.

4.5.2.3 Judgement Aspect Benchmarks are Mandatory

This determines whether judgement aspects are required to have benchmark values defined. These benchmarks give guidance to the assessment team on what quality of work is required to achieve each score from 0 – 3 for each judgement aspect. The default value is true.

4.5.2.4 Marking Teams Must be Defined for Each Sub Criterion

This field determines whether a marking team must be defined before a sub criterion is marked. The default value is false.

4.5.2.5 Allow to Set Marking Team Size for Each Skill

By default, judgement marking requires three Experts to assess and one Supervisor to step in when an Expert has to assess a compatriot Competitor. For a smaller competition there may not be enough Experts to allocate three to a marking team. This parameter allows the user to set the number of Experts in a marking team on the skill information page (see section [5.1](#)).

4.5.2.6 Hide Sub Criteria Being Marked on Future Days from Desktop Data Entry Interface

Checking this checkbox will hide any sub criteria set to be marked in the future on the PC marking and data entry user interface.

4.5.2.7 Hide Sub Criteria Being Marked on Future Days from Tablet Marking Interface

Checking this checkbox will hide any sub criteria set to be marked in the future on the tablet marking user interface.

4.5.2.8 Hide Maximum Mark of Aspects on Marking Forms Where Possible

This field sets the CIS to hide the maximum mark of an aspect for judgement aspects and measurement aspects where calculations are used. These types of aspects do not require the assessor to know what the maximum mark is in order to assess. Hiding the mark reduces the opportunity for tactical marking, helping to ensure a fairer assessment for all Competitors. The maximum mark will be hidden in the PC and tablet marking interfaces as well as the generated PDF marking forms.

4.5.2.9 Allow Markers to take Photos and Upload Images

This allows an assessor using a tablet for marking to take photographs with the tablet and attach it to the sub criterion being marked. These photographs will be included in the marking forms with completed marks that can be generated after marking.

4.5.2.10 Maximum Number of Photos per Sub Criterion for Each Competitor

This parameter sets the limit on the number of photographs that can be taken for each sub criterion for each Competitor. The default value is 4.

4.5.3 Results Configuration

Results	
Calculate final results and medals using	☒ WorldSkills Scale ☐ 500 Scale ☐ 100 Scale
Ex Aequo point difference	☒ 2 ☐ 1 ☐ 0
Gold Medal Points	4
Silver Medal Points	3
Bronze Medal Points	2
Medallion for Excellence Medal Points	1
Allow all Associate Members to award Best of Nation	☐

4.5.3.1 Calculate Final Results and Medals

Selects the algorithm used to generate the final results for each Competitor. The default value is the WorldSkills Scale, where the median result is set to 700. The old 500 scale calculation is also available. For competitions where there is no wish normalise results, the 100 scale marks can be used.

4.5.3.2 Ex Aequo point difference

The value selected for this parameter determines maximum point difference between two scores to result in tied medals. WorldSkills International currently uses a point difference of 2. For example, if the highest result in a skill competition is 753 and the next high is 751, both Competitors will receive a gold medal.

For more information on Ex Aequo rules and awarding medals please see the WorldSkills International competition rules.

4.5.3.3 Gold Medal Points

The number of points that a gold medal is worth in the Member comparison reports. The default value is 4.

4.5.3.4 Silver Medal Points

The number of points that a silver medal is worth in the Member comparison reports. The default value is 3.

4.5.3.5 Bronze Medal Points

The number of points that a bronze medal is worth in the Member comparison reports. The default value is 2.

4.5.3.6 Medallion for Excellence Medal Points

The number of points that a Medallion for Excellence medal is worth in the Member comparison reports. The default value is 1.

4.5.3.7 Allow all Associate Members to Award Best of Nation

By default, Associate Members with only one Competitor are not permitted to receive a Best of Nation award. By checking this checkbox all Associate Members will be able to award a Best of Nation award to one of their Competitors.

4.5.4 System Configuration

System	
File System Path for Images	C:/Program Files/cis/content/WorldSkills_Antarctica/
Sort People by	☒ Name ☐ Member
Unicode Font List	
Log Audit Trail of Mark Entry	☒
Log Audit Trail of Mark Locks	☒
Default Language	English

4.5.4.1 File System Path for Images

This is the path where all uploaded images will be stored. Images can be uploaded for secondary logos, Competitor photos, etc

4.5.4.2 Sort People By

This determines how people are sorted when they appear in lists in CIS. The default is to sort them alphabetically by last name. Alternatively, they can be sorted alphabetically by Member code.

4.5.4.3 Unicode Font List

The CIS accepts text entered in many different languages and generally does a good job of rendering the characters in the user interface. It is slightly more difficult to render these characters in the PDF documents. The default font used in the PDFs is Helvetica, but Helvetica cannot render all Unicode characters. If a character is encountered that can't be handled with Helvetica, the CIS looks through a list of other fonts until it encounters one that it knows will handle it.

On Windows installations the default behaviour will likely be sufficient because there are many Unicode fonts installed by default on Windows. Other operating systems may need to have a font installed that will handle the characters. You can let CIS know about these fonts by putting the names of the fonts in a comma-separated list in this field, for example "MS Song, Baekmuk Batang, Kochi Mincho".

4.5.4.4 **Log Audit Trail of Mark Entry**

This determines whether to track changes to marks. Whenever a mark is entered, updated, or deleted the CIS will keep a record of who made the change, what the new value is and the previous value was, and when the change was made. The default is to track this information.

4.5.4.5 **Log Audit Trail of Mark Locks**

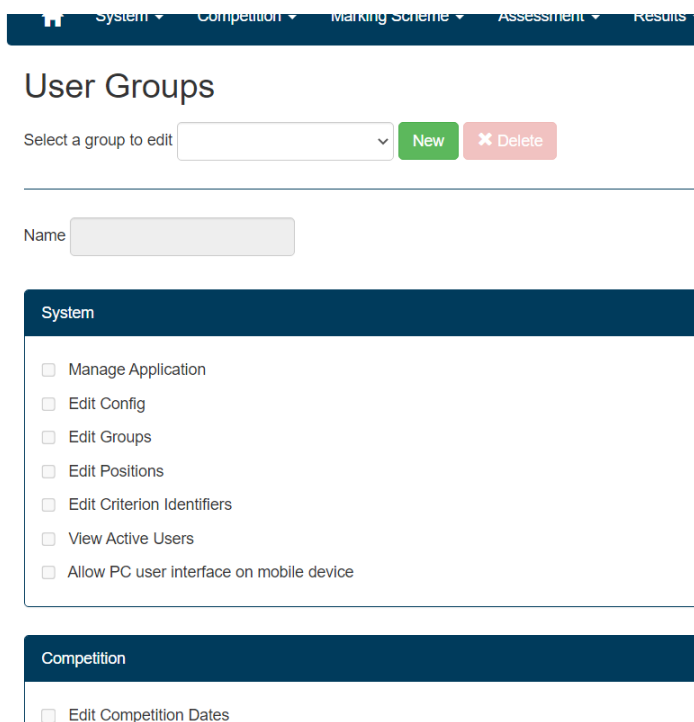
Similar to the audit trail for mark entry, the CIS can track when sub criteria are locked and unlocked for marking. The default is to track this information.

4.5.4.6 **Default Language**

This item allows to set a default language for the user interface.

4.6 User Groups

The second item of the System menu is the User Groups page.



The screenshot shows the 'User Groups' page. At the top is a navigation bar with a home icon and dropdown menus for 'System', 'Competition', 'Marking Scheme', 'Assessment', and 'Results'. Below the navigation bar is the 'User Groups' title. Under the title, there is a 'Select a group to edit' dropdown menu, a green 'New' button, and a red 'Delete' button. Below this is a 'Name' input field. The main content area is divided into two sections: 'System' and 'Competition'. The 'System' section contains a list of permissions with checkboxes: 'Manage Application', 'Edit Config', 'Edit Groups', 'Edit Positions', 'Edit Criterion Identifiers', 'View Active Users', and 'Allow PC user interface on mobile device'. The 'Competition' section contains one permission: 'Edit Competition Dates'.

This screen is used for the management of user groups and setting which parts of the CIS they have access to. A new competition is created with the “Admin” group which has access to all parts of CIS, the “Expert” group which is intended for those assessing the work of Competitors, and the “Skill Management Team” group for those who are overseeing each skill competition and managing the marking scheme.

To create a new user group, click the “New” button and enter a name for the group.

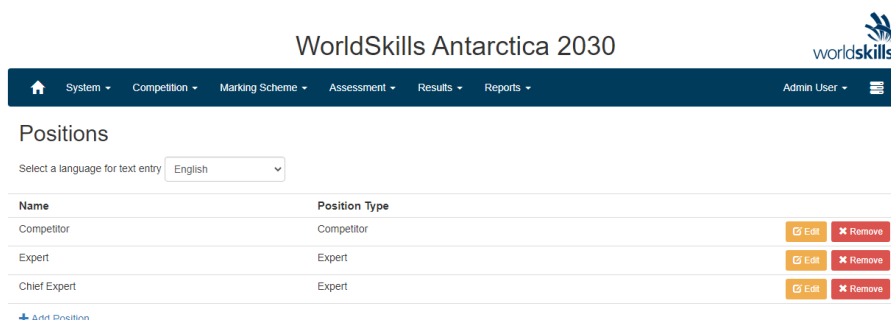
To delete a group, select it from the dropdown and click the “Delete” button.

Changes to permissions are saved automatically. There is no “Save” button.

Changes to permissions will be observed by users upon their next login.

4.7 Positions

The third item of the System menu is the Positions page. This screen is for defining the different positions that can be held by people in the CIS and is primarily used for defining a person's relationship to a skill.



WorldSkills Antarctica 2030

System • Competition • Marking Scheme • Assessment • Results • Reports • Admin User •

Positions

Select a language for text entry: English

Name	Position Type		
Competitor	Competitor	Edit	Remove
Expert	Expert	Edit	Remove
Chief Expert	Expert	Edit	Remove

[+ Add Position](#)

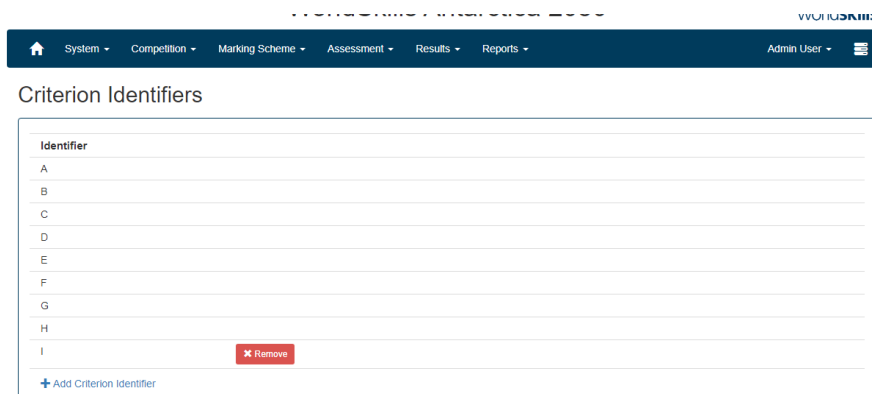
Each position has a name and a position type. The position types are summarised in the table below:

Position Type	Description
Competitor	People with this position will be able to have marks assigned to them
Expert	Experts can be assigned to marking teams and enter marks. They will also appear on generated sign-off forms.
Non-Marking Expert	Cannot be assigned to marking teams but will appear on generated sign-off forms, such as when signing off mark entry for their compatriot Competitor.
External Marker	Can be assigned to marking teams but will not appear on generated sign-off forms.
Non Participant	For positions such as Skill Competition Manager where they can be linked to a skill to access reports for that skill or enter mark data.
Data Entry	For positions such as Skill Assistants that only require access to enter marks for a skill.

A new CIS competition database will contain the “Competitor”, “Expert”, and “Chief Expert” positions by default.

4.8 Criterion Identifiers

The fourth item of the System menu is the Criterion Identifier page.



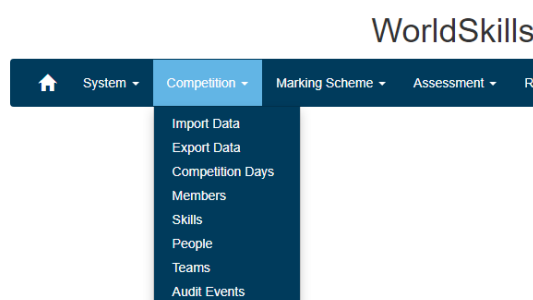
Identifier
A
B
C
D
E
F
G
H
I

[+ Add Criterion Identifier](#) [Remove](#)

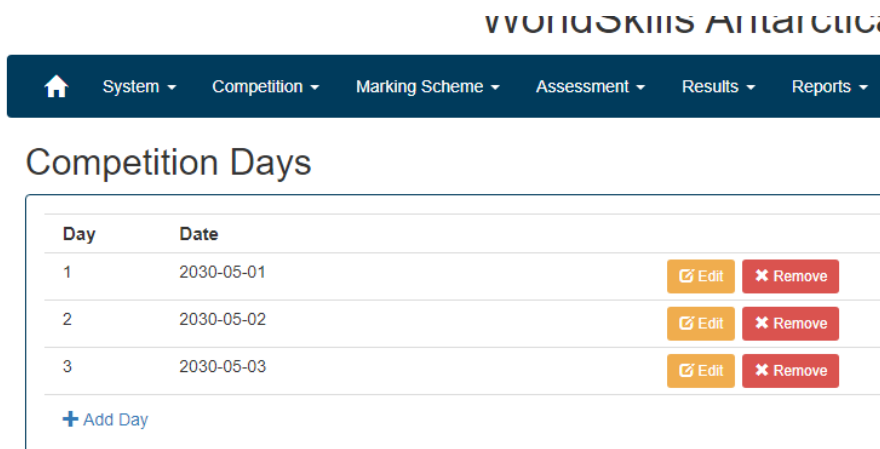
This screen is for managing the number of criteria that are available to be used in marking schemes. By default the CIS allows nine criteria, labelled from “A” to “I”. Criteria can removed or added from this screen.

4.9 Competition Days

The management of the competition days can be accessed by selecting the third item from the Competition menu.



By default the CIS is set to have all skills take place across the same set of competition days. To add a competition day, click the “Add Day” button, select a date, and then click the Save button.



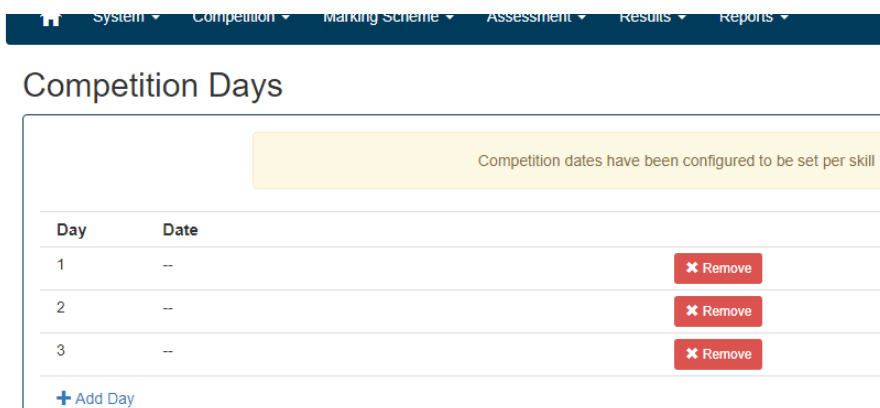
Day	Date	Edit	Remove
1	2030-05-01	Edit	Remove
2	2030-05-02	Edit	Remove
3	2030-05-03	Edit	Remove

[+ Add Day](#)

If a competition takes place over several events with different dates the CIS can be configured to have a different set of competition dates for each skill. To set the CIS to behave in this way, navigate to the

Configuration screen and untick the “Use same competition day for all skills” checkbox. Make sure to click the “Save” button.

Once the configuration has been updated, the Competition Days page is used only to set the number of days available to each skill competition. For example, in the screenshot below each skill will have three competition days available to them.



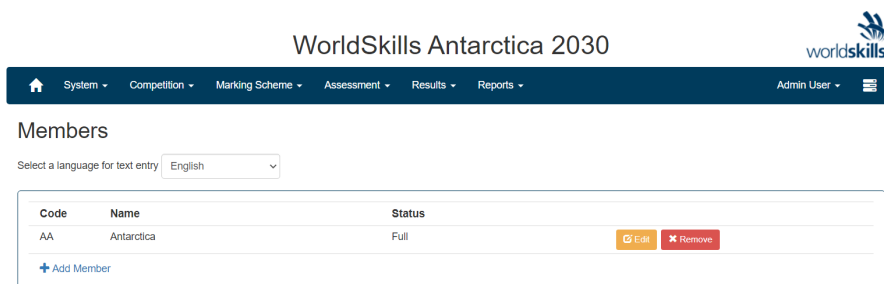
Day	Date	
1	--	✖ Remove
2	--	✖ Remove
3	--	✖ Remove

[+ Add Day](#)

The start date for each skill can be set on the skill information page (see section [5.1](#)).

4.10 Members

The “Members” item of the Competition menu gives access to manage the list of Members that are taking part in the competition.



Code	Name	Status	
AA	Antarctica	Full	Edit ✖ Remove

[+ Add Member](#)

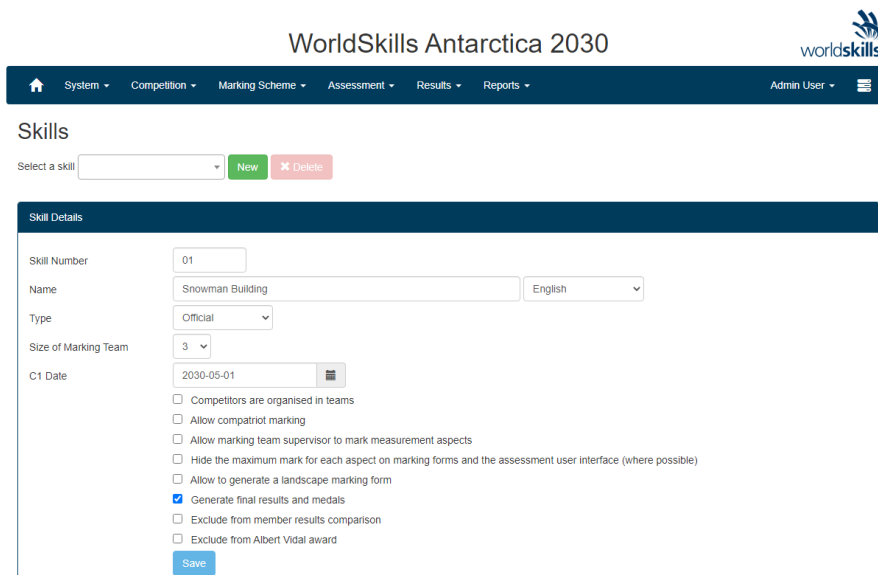
Here Members can be added and removed, and their details edited.

Members can also be imported from a spreadsheet on the “Import Data” page that can be reached from the Competition menu (see section [5.4.1](#)).

5 Adding Skill Information

5.1 Skills

The skill settings page can be accessed from the Competition menu.



WorldSkills Antarctica 2030

System Competition Marking Scheme Assessment Results Reports Admin User

Skills

Select a skill New Delete

Skill Details

Skill Number:

Name:

Type:

Size of Marking Team:

C1 Date:

☐ Competitors are organised in teams
☐ Allow compatriot marking
☐ Allow marking team supervisor to mark measurement aspects
☐ Hide the maximum mark for each aspect on marking forms and the assessment user interface (where possible)
☐ Allow to generate a landscape marking form
☒ Generate final results and medals
☐ Exclude from member results comparison
☐ Exclude from Albert Vidal award

Save

This screen allows the user to create and delete skills, as well as set some parameters regarding how the skill will operate.

5.1.1 Skill Number

This is a unique identifier for the skill. It has a maximum length of 10 characters and may contain number or letters. This field is mandatory.

5.1.2 Name

This is the name of the skill. You can add a different piece of text for the name for each of the different languages. It is mandatory to enter a name for at least one language.

5.1.3 Type

The type of the skill. To be included in all of the different result reports the "Official" skill type should be selected.

5.1.4 Size of Marking Team

If this has been enabled on the config screen it is possible to select the size of the marking team. WorldSkills International recommends only changing this from the default size of three if absolutely necessary.

5.1.5 C1 Date

If the competition has been configured to have different start dates for each skill (see section [4.5.1.4](#)) then this field will be available. Select a date that will be the first day of competition for this skill.

5.1.6 Competitors are Organised in Teams

This is used to indicate whether Competitors compete as individuals or in teams for this skill.

5.1.7 **Allow Compatriot Marking**

This checkbox indicates whether an Expert is permitted to assess the work of a Competitor from the same Member organization.

5.1.8 **Allow Marking Team Supervisor to Mark Measurement Aspects**

Generally, the supervisor of a marking team does not participate in the marking. This checkbox allows the supervisor to record the marks for measurement aspects.

5.1.9 **Hide the Maximum Mark**

Setting this parameter causes the CIS to hide the maximum mark of an aspect on the paper marking forms as well as the tablet and PC marking user interfaces. The purpose of this is to reduce the chances of tactical marking and bias. Assessors do not need to know the maximum mark to perform the assessment of a judgement aspect or a measurement aspect that uses calculations. Measurement aspects that do not make use of calculations may require the maximum mark, so these aspects will not have the maximum mark hidden.

5.1.10 **Allow to Generate a Landscape Marking Form**

Some skills may require a marking form that allows assessors to mark multiple competitors for the same aspect at the same time. The landscape marking form lists the aspects down the left of the page and provides space for multiple competitors across the page. The form is in landscape orientation rather than portrait.

5.1.11 **Generate Final Results and Medals**

This indicates whether a skill should have the 100 scale marks converted to common scale once marking is completed and to have medals assigned. For example, demonstration skills do not usually have official results created so would have this option selected.

5.1.12 **Exclude from Member Results Comparison**

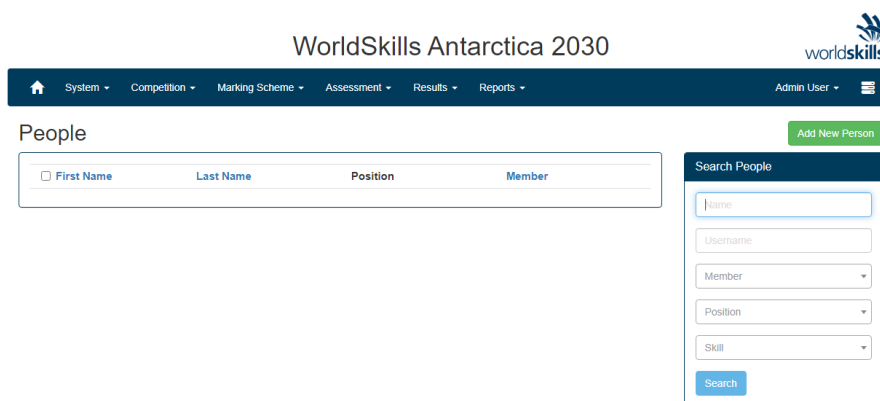
This parameter allows to exclude a skill from the Member comparison results that are generated at the conclusion of a competition. This is commonly used in skills where there are less than six Competitors, as they can produce odd mark distributions and skewed results on the WorldSkills Scale. See the WSI_SC_WorldSkills_Scale document for further details.

5.1.13 **Exclude from Albert Vidal Award**

This parameter allows to exclude the Competitors of a skill from Albert Vidal Award which is given to the Competitor(s) with the highest result on the WorldSkills Scale. This is commonly used in skills where there are less than six Competitors, as they can produce odd mark distributions and skewed results on the WorldSkills Scale. See the WSI_SC_WorldSkills_Scale document for further details.

5.2 People

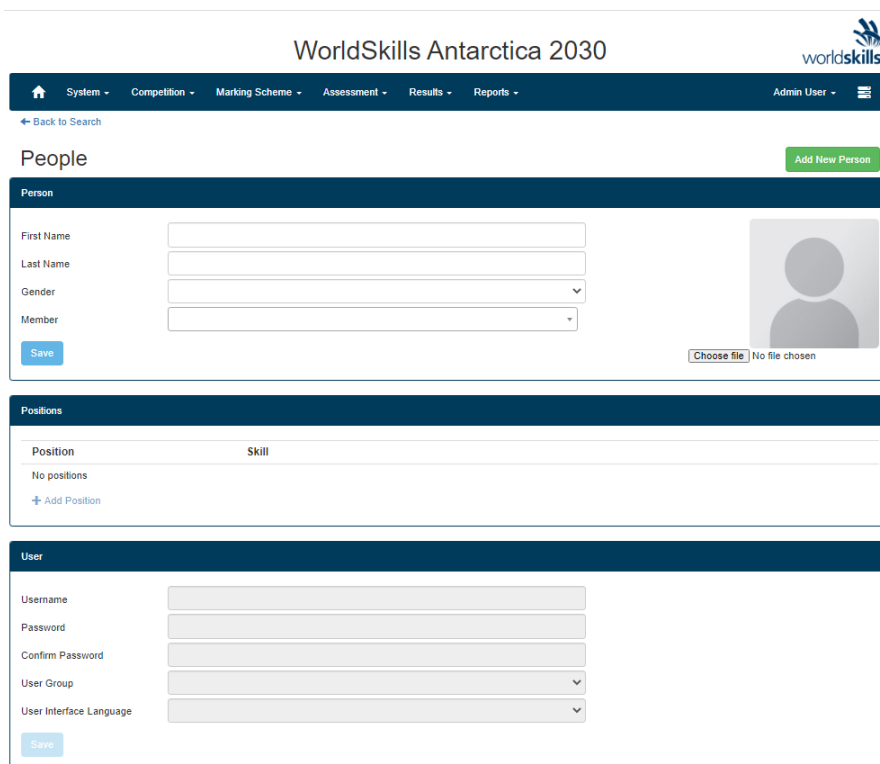
The people management screen can be accessed from the Competition menu.



The initial screen is the search screen, where people can be searched by a combination of name, username, Member, position, and skill.

5.2.1 Add a Person

To add a new person to CIS, click the “Add New Person” button. This will show a screen with three separate forms.



The person information form must be completed before the other two forms are enabled. The first and last names are mandatory, while the gender, Member and photograph are optional.

To add a position to the person, click the “Add Position” button, select a position and a skill, then click the “Save” button.

Position	Skill
Competitor	Snowman Building

[+ Add Position](#)
[Exclude From Results](#)
[Remove](#)

Positions can be removed by clicking the “Remove” button. Competitors can be excluded from the generated final results and medals by clicking the “Exclude From Results” button.

If the person requires a login to the CIS, complete the User form. Username, password, and user group are all mandatory. If the user would like to see the CIS user interface in a language other than the default one, it can be selected on this form.

User	
Username	expert1
Password	*****
Confirm Password	*****
User Group	Expert
User Interface Language	Croatian
Save	

5.2.2 Search and Edit People

WorldSkills Antarctica 2030



System Competition Marking Scheme Assessment Results Reports
Admin User

Add New Person

☐ First Name
Last Name
Position
Member

☐ Competitor
One
Competitor - Snowman Building
Antarctica

☐ Expert
One
Expert - Snowman Building
Antarctica

☐ Expert
Two
Expert - Snowman Building
North Pole

☐ Competitor
Two
Competitor - Snowman Building
North Pole

☐ Competitor
Three
Competitor - Snowman Building
Atlantis

☐ Expert
Three
Expert - Snowman Building
Atlantis

6 Results
Delete Selected

Search People

People can be searched by a combination of name, username, Member, position, and skill.

Clicking on a person’s name will redirect to the same form used when adding a person, with all relevant details filled.

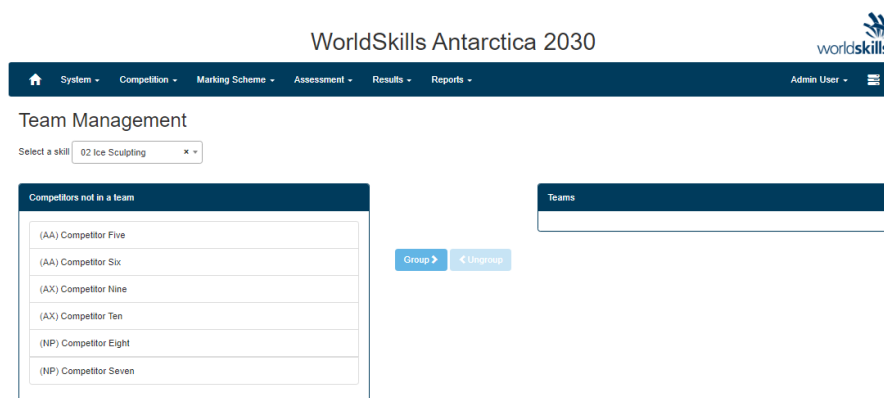
To delete people from the CIS, click the checkbox next to all the people to be deleted and click the “Delete Selected” button at the bottom of the page.

5.2.3 Importing People

People can be imported to CIS en masse from a spreadsheet (see section [5.4.2](#)).

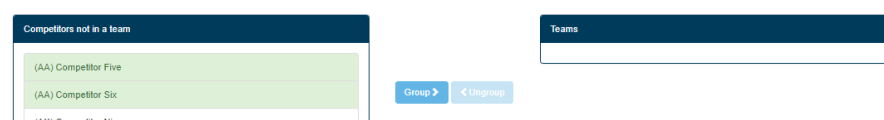
5.3 Teams

The Competitor teams management page can be accessed from the Competition menu. This is used to group Competitors together in teams for those skills that have been marked as team skills on the skill information page (see section [5.1.6](#)).



The table on the left lists all Competitors registered for the skill. The table on the right shows the teams that have been created.

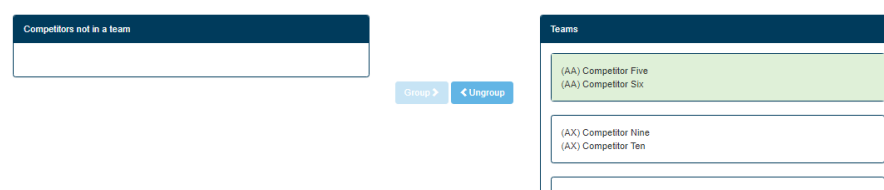
To create a team, select the Competitors from the list on the left, then click the “Group” button.



The Competitors will be removed from the list on the left, and the new team displayed on the right.



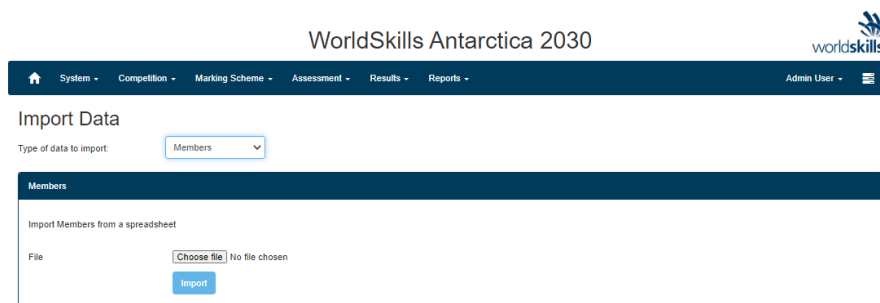
To disband a team, select the team from the list on the right and click the “Ungroup” button.



5.4 Importing Data

The screen for importing data to CIS can be accessed from the Competition menu. Note that importing marking scheme spreadsheets is now done from the Marking Scheme page (see section [6.2.2](#)).

5.4.1 Importing Members

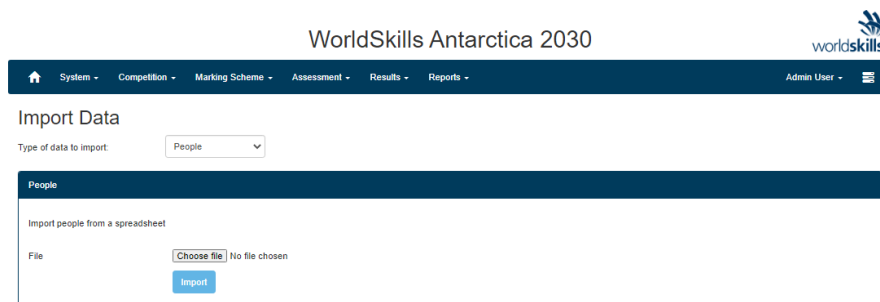


The first row of the spreadsheet to be imported should be a row of headers that indicate to the CIS what the content of the column is. The headers are:

abbreviation – The short identifier for the Member, for example their two letter ISO code.

name – The name of the Member

5.4.2 Importing People



The first row of the spreadsheet to be imported should be a row of headers that indicate to the CIS what the content of the column is. The headers are:

first name – The first name of the person. This is required.

last name – The last name of the person. This is required.

member – The short identifier for the Member that the person belongs to, for example “AE”

position – The name of the position of the person. This must match exactly to a position name defined already in the CIS (see section [4.7](#)).

skill – The skill number of the skill that the person holds the position in.

username – If the person is to have a login you can supply their username. This must be unique.

password – If the person is to have a login you can supply their password.

user group – If the person is to have a login you should supply the name of the user group to which they will belong.

If you don't want to supply passwords in plain text you can provide them hashed with the Bcrypt hash function:

salt – The Bcrypt salt for the password

hashed password – The password hashed with the Bcrypt function

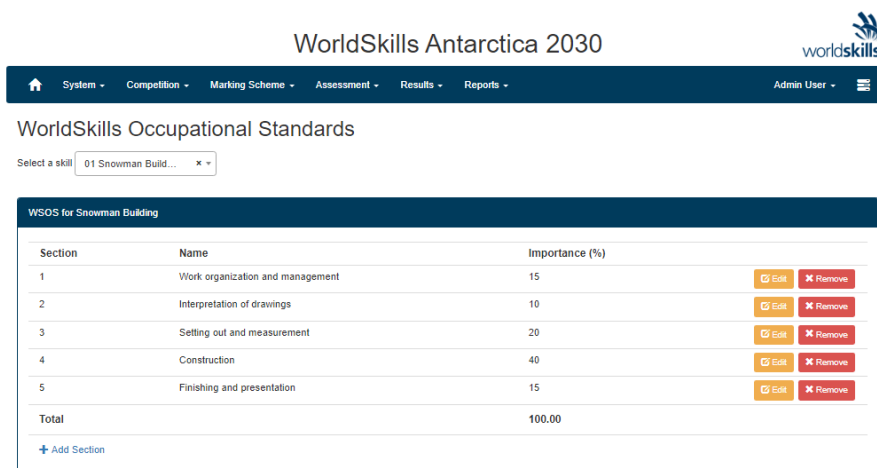
To successfully create a login for a person, the spreadsheet must contain a user name, a user group, and either a plain text password or both a salt and hashed password.

6 Preparing for Marking

6.1 WorldSkills Occupational Standards

The WorldSkills Occupational Standards (WSOS) are designed to provide a description of the occupation: what the practitioner does, what they do it with, where they do it, the occupation's significance, risks and opportunities plus their most important knowledge, skills, and behaviours. These are broken down into sections and a percentage value is assigned as to their importance to the skill.

The WorldSkills Occupational Standards management screen can be accessed from the Marking Scheme menu.



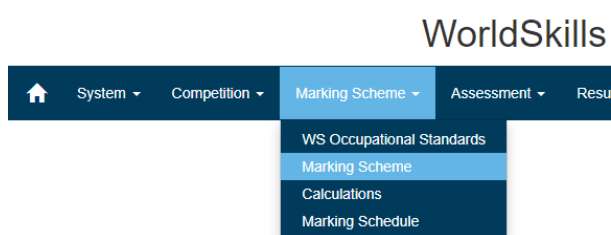
Section	Name	Importance (%)	
1	Work organization and management	15	Edit Remove
2	Interpretation of drawings	10	Edit Remove
3	Setting out and measurement	20	Edit Remove
4	Construction	40	Edit Remove
5	Finishing and presentation	15	Edit Remove
Total		100.00	

[+ Add Section](#)

WSOS sections can be manually added, edited and removed from this screen. The WSOS sections can also be imported along with the marking scheme (see section [6.2.2](#)).

6.2 Marking Scheme

The marking scheme management screen is available from the Marking Scheme menu.



Marking schemes can be created manually or edited with the Marking Scheme Editor, or they can be imported from a spreadsheet.

6.2.1 Marking Scheme Editor

WorldSkills Antarctica 2030 worldskills

System ▾
Competition ▾
Marking Scheme ▾
Assessment ▾
Results ▾
Reports ▾
Admin User ▾

Marking Scheme

Select a skill: 01 Snowman Build... ▾

Add Criterion
Lock Marking Scheme

Criterion Total 0.00

WSOS Allocation	
Section	Total
1	0 / 15
2	0 / 10
3	0 / 20
4	0 / 40
5	0 / 15

In a newly created skill, the marking scheme editor will show an empty marking scheme. The criterion total is zero because there are no criteria defined yet. The WorldSkills Occupational Standards (WSOS) allocation box is showing zero for each section because no aspects have been allocated to any WSOS. The marking scheme can be built up using the editor create criteria, sub criteria, and aspects and these aspects can be allocated to WSOS.

6.2.1.1 Adding Criteria

Clicking the “Add Criterion” button will create the first criterion, labelled A.

Marking Scheme

Select a skill: 01 Snowman Build... ▾

Add Criterion
Lock Marking Scheme

A

0.00
✕

Criterion Total 0.00

The exclamation mark in the red circle indicates that the definition of that criterion is incomplete. To delete the criterion, click the red button with an “x”. Once the criterion name and maximum mark have been entered, an arrow will appear on the right of the criterion.

Marking Scheme

Select a skill: 01 Snowman Build... ▾

Add Criterion
Lock Marking Scheme

A

28.00
✕
➔

Criterion Total 28.00

6.2.1.2 Adding Sub Criteria

Clicking the arrow will expand the criterion.

Marking Scheme

Select a skill

A	Accuracy and Scale of Main Components	28.00	
Add Sub Criterion		Sub Criterion Total	0.00
Add Criterion		Lock Marking Scheme	Criterion Total 28.00

As there are no sub criteria defined for criterion A, the sub criterion total is zero. To add a sub criterion, click the “Add Sub Criterion” button and enter the name and maximum mark for the sub criterion.

Marking Scheme

Select a skill

A	Accuracy and Scale of Main Components	28.00	
A1	Accuracy and scale of Legs	10.00	
Add Sub Criterion		Sub Criterion Total	10.00
Add Criterion		Lock Marking Scheme	Criterion Total 28.00

6.2.1.3 Adding Aspects

When the sub criterion is expanded, the buttons for adding judgement and measurement marks are revealed.

Marking Scheme

Select a skill

A	Accuracy and Scale of Main Components	28.00	
A1	Accuracy and scale of Legs	10.00	
Add Judgement Aspect		Aspect Total	0.00
Add Measurement Aspect			
Add Sub Criterion		Sub Criterion Total	10.00
Add Criterion		Lock Marking Scheme	Criterion Total 28.00

To add a judgement aspect, click the “Add Judgement Aspect” button.

Marking Scheme

Select a skill 01 Snowman Build...

A Accuracy and Scale of Main Components		28.00	
A1	Accuracy and scale of Legs	10.00	
A1.J1	WSOS 5 Name Smoothness of Appearance of Right Leg	1.00	
Score 0 Surface not smooth and many surface defects. Tooling marks visible. Score 1 Surface is smooth but may have some tooling marks. Score 2 Surface is smooth but with some tooling marks. Score 3 Surface is smooth and without any tooling defects or marks			
Add Judgement Aspect Add Measurement Aspect		Aspect Total	1.00
Add Sub Criterion		Sub Criterion Total	10.00
Add Criterion Lock Marking Scheme		Criterion Total	28.00

WSOS Allocation

Section	Total
1	0 / 15
2	0 / 10
3	0 / 20
4	0 / 40
5	1 / 15

Like the criterion and sub criterion, a name and maximum mark is required for the aspect. The WSOS section can also be selected from the drop down. Once selected, the totals in WSOS allocation box on the right will update.

For judgement aspects, the benchmarks required to achieve each score should also be defined. These provide guidance to the assessors and help to ensure some consistency in marking.

If extra description of the aspect is required, extra lines can be added by clicking the "+ Desc" button.

To add a measurement aspect, click the "Add Measurement Aspect" button.

Marking Scheme

Select a skill 01 Snowman Build...

A Accuracy and Scale of Main Components		28.00	
A1	Accuracy and scale of Legs	10.00	
A1.J1	WSOS 5 Name Smoothness of Appearance of Right Leg	1.00	
Score 0 Surface not smooth and many surface defects. Tooling marks visible. Score 1 Surface is smooth but may have some tooling marks. Score 2 Surface is smooth but with some tooling marks. Score 3 Surface is smooth and without any tooling defects or marks			
A1.M1	WSOS 4 Name Length of Right Leg Ankle to Pelvis and of course this Aspect could be longer than one line o	800 + 1.50	
This is the area where additional information for marking an aspect can be entered			
Add Judgement Aspect Add Measurement Aspect		Aspect Total	2.50
Add Sub Criterion		Sub Criterion Total	10.00
Add Criterion Lock Marking Scheme		Criterion Total	28.00

WSOS Allocation

Section	Total
1	0 / 15
2	0 / 10
3	0 / 20
4	1.5 / 40
5	1 / 15

Like judgement aspects, measurement aspects require a name and a maximum mark. Measurement aspects also have a "Requirements" field, for indicating any constraints on the measurement. For example, a measurement must be 800mm +/- 5mm.

Measurement aspects can also be allocated to a WSOS and can have extra description lines added.

6.2.1.4 Moving Aspects and Sub Criteria

To reorder aspects, click and drag the aspect to the desired location.

WSOS	Name	Requirements	Max Mark	
A1.M1	Length of Right Leg Ankle to Pelvis and of course this Aspect could be longer than one line o	800 +	1.50	
This is the area where additional information for marking an aspect can be entered				
A1.M2	Diameter of Right Leg at Calf	100mm	0.50	
A1.M3	Length of Right Leg Ankle to Pelvis and of course this Aspect could be longer than one line o	150mm	2.00	
A1.M4	Length of Left Leg Ankle to Pelvis	800 +	1.50	

Aspects can also be dragged to a different sub criterion.

A1.M2	5	Diameter of Right Leg at Thigh	150m	2.00	+ Desc
A1.M3	4	Length of Right Leg Ankle to Pelvis and of course this Aspect could be longer than one line o	800 +	1.50	+ Desc
This is the area where additional information for marking an aspect can be entered					
A1.M4	5	Length of Left Leg Ankle to Pelvis	800 +	1.50	+ Desc
				Aspect Total	6.50
Add Judgement Aspect Add Measurement Aspect					
A2	1	Accuracy and Scale of Body		6.00	+ Desc
This is the area where additional information for marking an aspect can be entered					
				Aspect Total	0.00
Add Judgement Aspect Add Measurement Aspect					

Sub criteria can also be dragged and dropped to reorder within a criterion or dragged to a different criterion.

A	1	Accuracy and Scale of Main Components	28.00	+ Desc
A1	1	Accuracy and scale of Legs	10.00	+ Desc
A2	1	Accuracy and scale of Body	6.00	+ Desc
Add Sub Criterion			Sub Criterion Total	16.00
B	1	Design and Appearance of Extremities & Facial Elements	12.50	+ Desc
A2	1	Accuracy and scale of Body		
Add Sub Criterion			Sub Criterion Total	0.00
Add Criterion Lock Marking Scheme			Criterion Total	40.50

6.2.2 Importing a Marking Scheme

Another method of loading a marking scheme into CIS is to import from a spreadsheet. The spreadsheet can be one exported from another CIS competition or one that has been built manually. CIS version 5.0 can import spreadsheets exported from CIS version 4.0 onwards. Marking schemes exported from older versions of CIS will need to be adjusted to migrate from objective and subjective aspects to measurement and judgement ones.

Import Marking Scheme

Import a marking scheme from a spreadsheet and replace the existing marking scheme.

File Snowman_MS.xlsx

☒ Import the WorldSkills Occupational Standard sections
 ☒ Import Marking Scheme
 ☒ Import Calculations
 ☒ Preserve existing marking schedule where possible
 ☒ Clear unused calculations from the Calculation Library

There are several options available when importing a marking scheme from a spreadsheet.

Import the WSOS sections – If the WorldSkills Occupational Standards have been defined in the spreadsheet they can be imported. Any existing WSOS defined in CIS will be replaced.

Import Marking Scheme – The marking scheme can be de-selected if the user only wishes to import the WSOS or calculations.

Import Calculations – Import CIS calculations (see section 6.3) if defined in the spreadsheet.

Preserve existing marking schedule – When importing a marking scheme to a skill that already has a marking scheme defined, the CIS can attempt to keep the same marking schedule (see section 6.4) for each sub criterion. For example, if sub criterion A1 is due to be marked on day 3 of the competition, the newly imported A1 will also be scheduled to be marked on day 3.

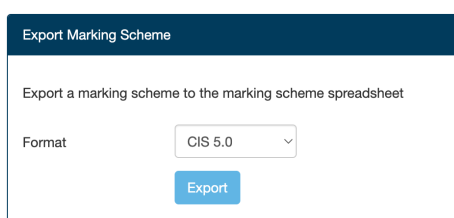
Clear unused calculations from the Calculation Library – Any calculations that have not been assigned from the calculation library are removed when importing the new marking scheme. See section [6.3](#).

6.2.3 Locking a Marking Scheme

Once the marking scheme and calculations (see section [6.3](#)) have been defined and are ready to be used to assess Competitors, the marking scheme should be locked so that no further changes can be made. To do lock the marking scheme, simply click the “Lock Marking Scheme” button located just below the marking scheme editor.

6.2.4 Exporting a Marking Scheme

Marking schemes (along with calculations, WorldSkills Occupational Standards, and some marking schedule information) can be exported from the CIS to a spreadsheet. The spreadsheets can be imported directly into a CIS competition.

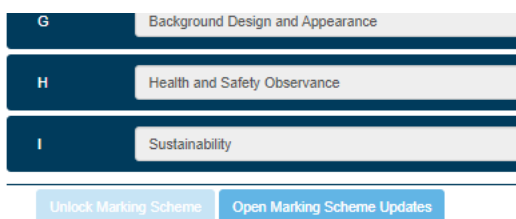


The dialog box titled "Export Marking Scheme" contains the instruction "Export a marking scheme to the marking scheme spreadsheet". Below this, there is a "Format" label and a dropdown menu currently set to "CIS 5.0". At the bottom of the dialog is a blue "Export" button.

The format of the spreadsheet can be selected, allowing to export marking schemes that are compatible with older versions of CIS. Note that older versions of the spreadsheet do not contain calculation, WorldSkills Occupational Standards, or marking schedule information included.

6.2.5 Adjusting a Marking Scheme After Marking has Started

Occasionally while assessing Competitors some mistakes are discovered in the marking scheme. At this stage the marking scheme cannot be unlocked, but it can be partially opened for some types of updates. The “Unlock Marking Scheme” button is disabled, but the “Open Marking Scheme Updates” button is now available.



The interface shows a list of criteria with their corresponding WorldSkills Occupational Standard sections:

- G** Background Design and Appearance
- H** Health and Safety Observance
- I** Sustainability

At the bottom, there are two buttons: "Unlock Marking Scheme" (disabled) and "Open Marking Scheme Updates" (active).

Clicking this button allows limited changes to parts of the marking scheme that do not have any marks entered. The names of criteria, sub criteria, and aspects can be changed. Judgement benchmark descriptions can be altered. Extra description lines can be changed, added and removed. The aspects' WorldSkills Occupational Standard sections can be changed. Calculations that have not been used can be changed, and new calculations can be added or existing ones removed.

It is important to note that mark values cannot be changed. Criteria, sub criteria and aspects cannot be added, removed or re-ordered.

It is also important to note that while the marking scheme is open for updates, marking for the skill is disabled. The marking entry screens will display the message “Marking scheme is currently being updated” and all the marking fields will be disabled. The marks can be viewed, but not changed.

Mark Data Entry

Select a skill: 01 Snowman Build... x



Aspects marked for this sub criterion	12 / 12
Total marks/scores entered	38 / 127

Day 1

A1 - Accuracy and scale of Legs

AA - Competitor One

Marking scheme is currently being updated

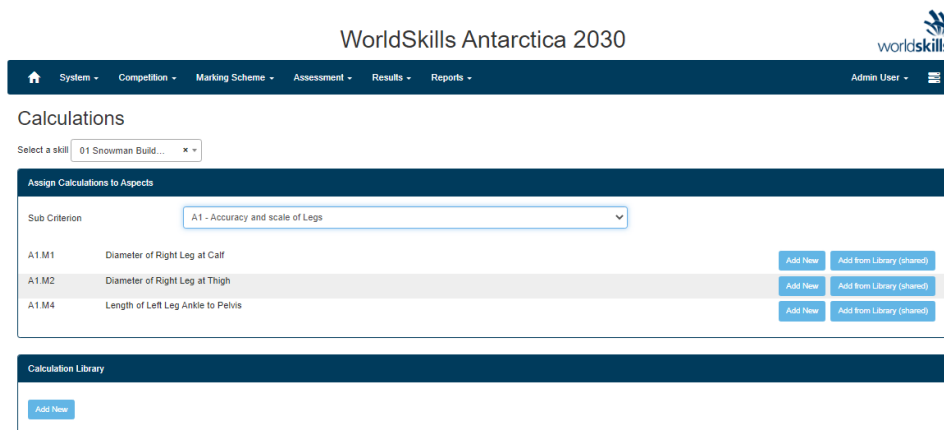
Judgement Marking Form			
Aspect	Description	Scores (0 - 3)	Mark Awarded
A1 J1	Smoothness of Appearance of Right Leg	(AX) Expert Three 2 (FS) Expert Four 2	0.56 / 1.00

All changes to a marking scheme are logged and a report of these changes can be generated (see section [7.1.9](#)).

Once changes are complete, click the “Close Marking Scheme Updates” button to cease editing and allow marking to resume.

6.3 Calculations

The calculation facility of the CIS provides the ability to award a mark for a measurement aspect based on the measurement value alone. The assessor does not need to enter a mark value. For example, if an aspect requires a length of wood should be 100mm with a tolerance of +/- 5mm, the CIS can be configured to award the mark when a measurement in that range is entered and award zero if outside the range.



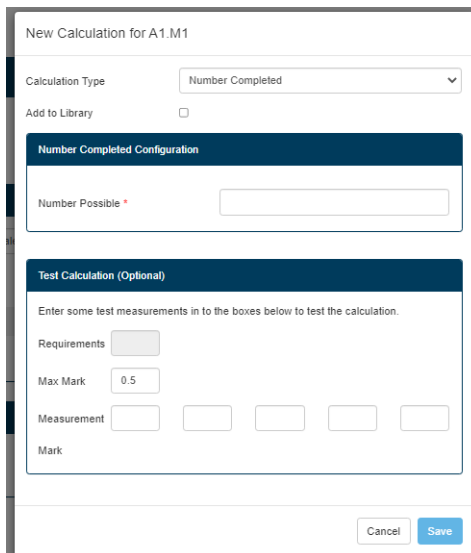
The calculations management screen can be accessed from the Marking Scheme menu.

Calculations can be created directly on an aspect or added to the calculation library for the skill.

It is worth noting that calculations cannot award negative marks. The lowest mark from a calculation is zero.

6.3.1 Adding a New Calculation

Clicking the “Add New” button will pop up a window for entering the calculation data.



The calculation type can be selected from the dropdown at the top of the form. If the “Add to Library” checkbox is ticked a field will appear for entering a name for the calculation and it will be added to the library.

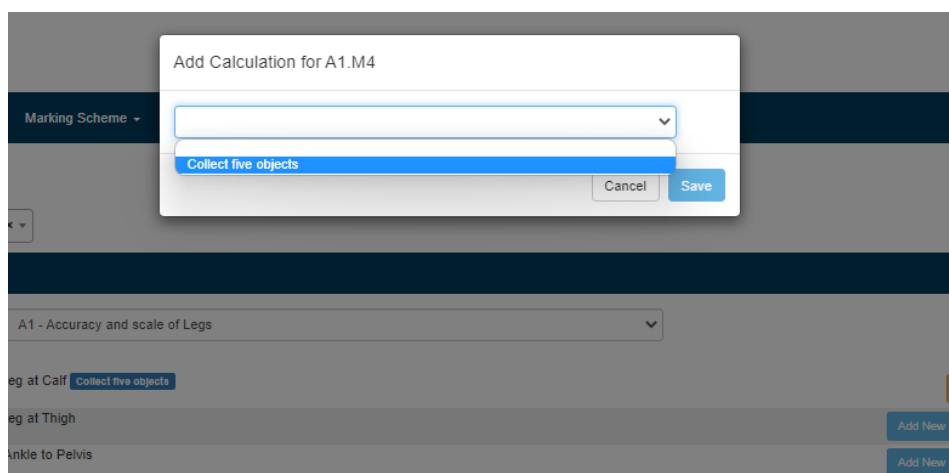
The next box displays all the parameters required for the selected calculation type. Items marked with a red star must be completed.

The lower part of the window provides an area for testing the calculation parameters. There are five boxes available for entering test measurements. Marks will be displayed underneath each test measurement.

6.3.2 Adding from the Library

Calculations in the library can be shared by any number of aspects. Changes to the settings of the calculation will be reflected in all of the aspects that have the calculation assigned.

Clicking the “Add from Library (shared)” button pops up a window to select a calculation from the library.

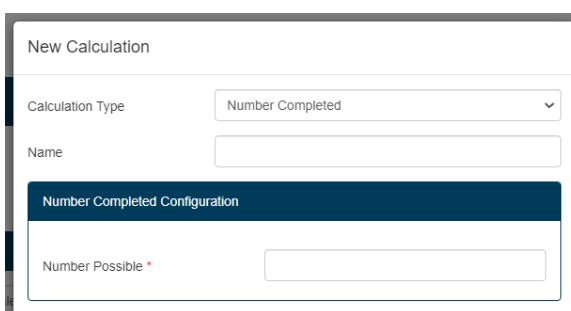


6.3.3 Calculation types

There are five types of calculations that can be configured for use with measurement aspects.

6.3.3.1 Number Completed

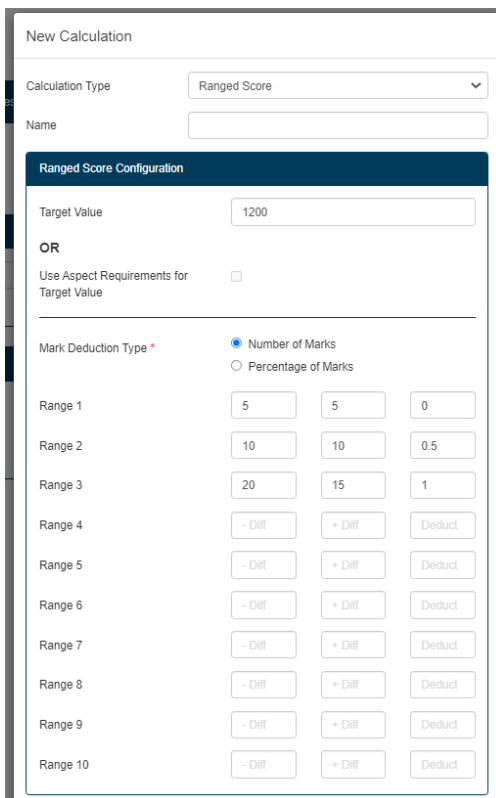
The Number Completed calculation is for aspects that measure the number of times an action is successfully completed. It awards a percentage of marks based on the number of items completed. For example, if a Competitor were required to successfully complete 10 solder joints but only completed 8 they would receive 80% of the maximum mark for that aspect.



Number Possible – the target number required for the Competitor to be awarded the maximum marks for the aspect.

6.3.3.2 Ranged Score

This calculation type calculates the Competitor's mark based on how close a value is to a target value. It provides the ability to define up to ten ranges of values and the amount of marks to be deducted in each value range. If the Competitor's value does not fall within any range they are awarded a mark of zero. There are several parameters for the calculation type.



The screenshot shows the 'New Calculation' form with the 'Calculation Type' set to 'Ranged Score'. The 'Name' field is empty. The 'Ranged Score Configuration' section includes a 'Target Value' of 1200, an unchecked checkbox for 'Use Aspect Requirements for Target Value', and a 'Mark Deduction Type' section with 'Number of Marks' selected. Below this are ten ranges (Range 1 to Range 10) with input fields for values and a 'Deduct' button for each.

Range	Value 1	Value 2	Deduct
Range 1	5	5	0
Range 2	10	10	0.5
Range 3	20	15	1
Range 4	- Diff	+ Diff	Deduct
Range 5	- Diff	+ Diff	Deduct
Range 6	- Diff	+ Diff	Deduct
Range 7	- Diff	+ Diff	Deduct
Range 8	- Diff	+ Diff	Deduct
Range 9	- Diff	+ Diff	Deduct
Range 10	- Diff	+ Diff	Deduct

Target Value – the value that the Competitor should achieve.

User Aspect Requirements for Target Value – instead of defining the target value in the calculation, take the target value from the requirements field of the target aspect. This allows the same calculation to be used on many different aspects. The requirements value must only be a number.

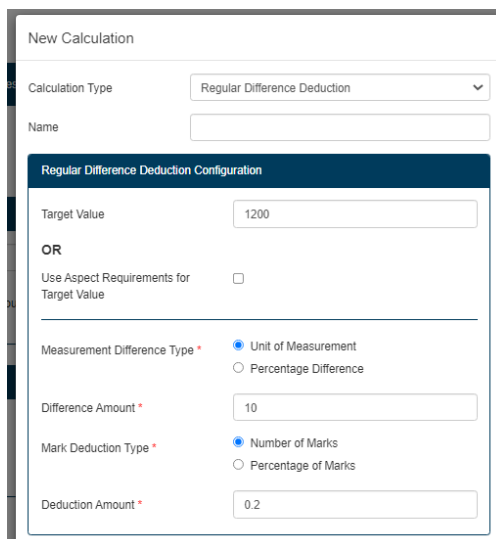
Mark Deduction Type – whether the value in the “Deduct” column is the number of marks to deduct or the percentage of marks to deduct.

Range 1 .. 10 – A set of ranges that define how many marks are deducted for values that fall within that range. The smallest possible range that fits the Competitor's value will be selected. The range values are inclusive, so in the screenshot above a value of 1205 will be included in the first range and have no marks deducted, but a value of 1205.01 will fall into the next range and lose 0.5 marks.

In the example screenshot above, the height of a wall built by a Competitor is being measured. The target height is 1200mm. The Competitors are allowed to be within +/- 5mm, so the first range deducts zero marks. The second range is for walls that are between 5 – 10mm over or under. The third range is for walls that are between 10 – 15mm over or 10 – 20mm under the target. Anything outside that range will get zero marks.

6.3.3.3 Regular Difference Deduction

This calculation type determines a Competitor's mark by how many steps they are away from a target value. The parameters of this calculation define how big the step is and how many marks should be deducted for each step.



The screenshot shows a 'New Calculation' form. At the top, 'Calculation Type' is set to 'Regular Difference Deduction'. Below it is a 'Name' field. A section titled 'Regular Difference Deduction Configuration' contains several fields: 'Target Value' is set to 1200; there is an 'OR' section with 'Use Aspect Requirements for Target Value' as an unchecked checkbox; 'Measurement Difference Type' has 'Unit of Measurement' selected; 'Difference Amount' is set to 10; 'Mark Deduction Type' has 'Number of Marks' selected; and 'Deduction Amount' is set to 0.2.

Target Value – the value that the Competitor should achieve.

User Aspect Requirements for Target Value – instead of defining the target value in the calculation, take the target value from the requirements field of the target aspect. This allows the same calculation to be used on many different aspects. The requirements value must only be a number.

Measurement Difference Type – whether each step should be a set measurement or a percentage of the target value.

Difference Amount – either the measurement difference or the percentage difference value

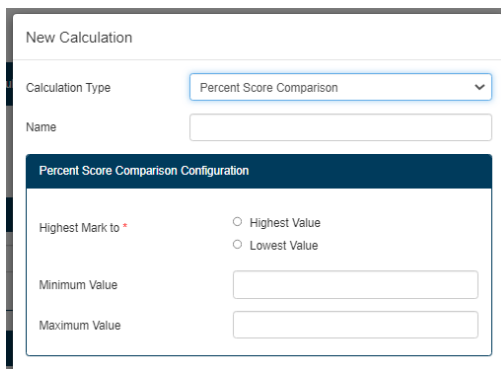
Mark Deduction Type – whether to reduce a set number of marks or a percentage of the maximum mark.

Deduction Amount – either the number of marks to deduct or the percentage to deduct.

For example, in the screenshot above every 10mm that a Competitor is away from the target value they will lose 0.2 marks.

6.3.3.4 Percent Score Comparison

This calculation type compares the results of all Competitors for this aspect and awards the maximum mark to the Competitor with the best value and zero marks to the Competitor with the worst value. All other Competitors receive a percentage of the maximum mark depending on how close they are to the best value.



The screenshot shows a 'New Calculation' form. The 'Calculation Type' is set to 'Percent Score Comparison'. Below this, there is a 'Name' field. A section titled 'Percent Score Comparison Configuration' contains three fields: 'Highest Mark to' with radio buttons for 'Highest Value' and 'Lowest Value', 'Minimum Value', and 'Maximum Value'.

Highest Mark to – whether the best value is the highest (for example, furthest distance travelled) or the lowest value (for example, fastest time).

Minimum Value – optionally set a minimum value that Competitors can achieve to score marks.

Maximum Value – optionally set a maximum value that Competitors can achieve to score marks.

This functionality can be demonstrated with an example. An aspect has been defined where the maximum mark (2 marks) is awarded to the Competitor with the fastest time and zero marks are awarded to the Competitor with the slowest time. The option for the “Highest Mark to” parameter is set to “Lowest Value”. During the competition the fastest Competitor takes 10 seconds to complete the task, and the slowest Competitor takes 26 seconds, giving a time difference of 16 seconds. After the times for all Competitors have been entered into CIS the marks will be calculated as follows:

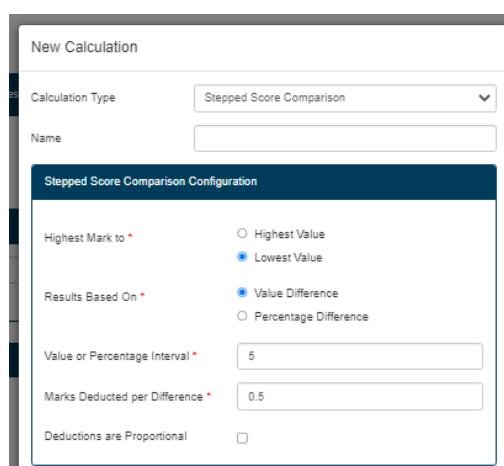
Competitor	Time	Difference to Slowest Time	Calculation	Mark
1	10	16	$16 / 16 \times 2 =$	2
2	12	14	$14 / 16 \times 2 =$	1.75
3	15	11	$11 / 16 \times 2 =$	1.38
4	21	5	$5 / 16 \times 2 =$	0.63
5	26	0	$0 / 16 \times 2 =$	0

If a maximum time of 20 seconds is set, the calculations will be as follows:

Competitor	Time	Difference to Slowest Time	Calculation	Mark
1	10	10	$10 / 10 \times 2 =$	2
2	12	8	$8 / 10 \times 2 =$	1.60
3	15	5	$5 / 10 \times 2 =$	1
4	21 (max 20)	0	$0 / 10 \times 2 =$	0
5	26 (max 20)	0	$0 / 10 \times 2 =$	0

6.3.3.5 Stepped Score Comparison

This calculation type compares the results of all Competitors for this aspect and awards the maximum mark to the Competitor with the best value. Marks for other Competitors are then deducted at a specified rate. If the number of marks to deduct works out to be more than the maximum marks for the aspect the Competitor is simply awarded zero marks. The marks can be deducted at “stepped” intervals or a proportional rate.



The screenshot shows the 'New Calculation' dialog box with the 'Calculation Type' set to 'Stepped Score Comparison'. The 'Name' field is empty. The 'Stepped Score Comparison Configuration' section includes the following settings:

- Highest Mark to:** Radio buttons for 'Highest Value' and 'Lowest Value'. 'Lowest Value' is selected.
- Results Based On:** Radio buttons for 'Value Difference' and 'Percentage Difference'. 'Value Difference' is selected.
- Value or Percentage Interval:** A text box containing the value '5'.
- Marks Deducted per Difference:** A text box containing the value '0.5'.
- Deductions are Proportional:** A checkbox that is currently unchecked.

Highest Mark to – whether the maximum mark for the aspect goes to the highest value or the lowest.

Results Based On – whether each “step” is measured as a numerical value or a percentage.

Value or Percentage Interval – the size of the “step”.

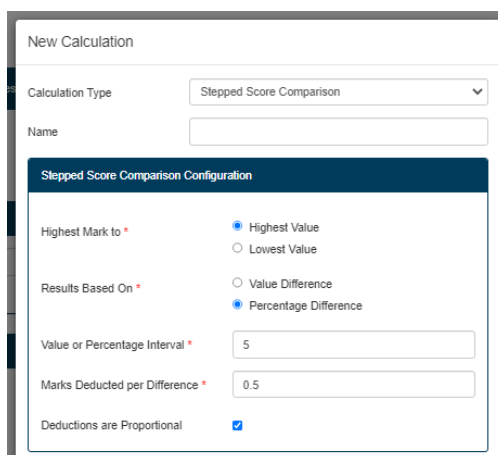
Marks Deducted per Difference – how many marks are deducted per step.

Deductions are Proportional – whether the evaluation is stepped or a steady rate.

In the screenshot above maximum marks are awarded to the fastest time, so the highest mark is awarded to the lowest value. The remaining parameters ensure that for every 5 seconds slower than the fastest time, the Competitor will lose 0.5 marks. Since the deductions have not been marked as proportional, the marks are calculated in a stepped fashion. This means that times 0 – 4 seconds slower than the fastest lose no marks, 5 – 9 seconds lose 0.5 marks, and so on. If the maximum mark for the aspect is 2 there might be marks such as:

Competitor	Time	Num of 5 sec steps	Calculation	Mark
1	10	0	$2 - (0 \times 0.5) =$	2
2	12	0	$2 - (0 \times 0.5) =$	2
3	15	1	$2 - (1 \times 0.5) =$	1.50
4	17	1	$2 - (1 \times 0.5) =$	1.50
5	23	2	$2 - (2 \times 0.5) =$	1
6	30	4	$2 - (4 \times 0.5) =$	0

To demonstrate another example, the following configuration is for an aspect that awards the highest mark to highest number of watts of power output.



The screenshot shows the 'New Calculation' window with the following configuration:

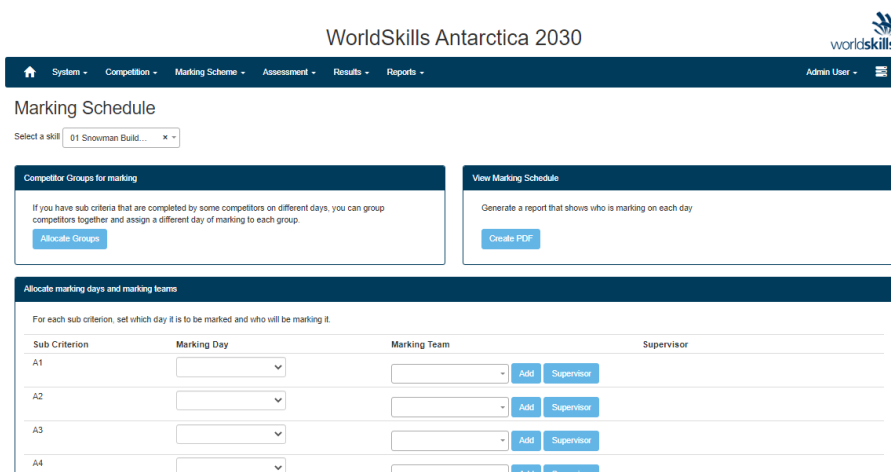
- Calculation Type: Stepped Score Comparison
- Name: (empty field)
- Stepped Score Comparison Configuration:
 - Highest Mark to: ☒ Highest Value, ☐ Lowest Value
 - Results Based On: ☐ Value Difference, ☒ Percentage Difference
 - Value or Percentage Interval: 5
 - Marks Deducted per Difference: 0.5
 - Deductions are Proportional: ☒

For every 5% less than the highest power output, 0.5 marks are deducted. As the deductions have been marked as proportional, marks are deducted at a steady rate rather than stepped. If the maximum mark for the aspect is 2 there may be marks such as:

Competitor	Watts	% less than the highest	Calculation	Mark
1	800	0	$2 - (0 \times 0.5 / 5) =$	2
2	783	2.125	$2 - (2.125 \times 0.5 / 5) =$	1.79
3	730	8.75	$2 - (8.75 \times 0.5 / 5) =$	1.13
4	699	12.625	$2 - (12.625 \times 0.5 / 5) =$	0.74
5	680	15	$2 - (15 \times 0.5 / 5) =$	0.5
6	620	22.5	$2 - (22.5 \times 0.5 / 5) =$	0

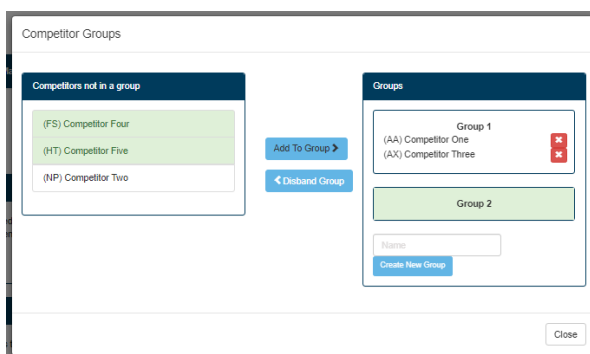
6.4 Marking Schedule

The Marking Schedule screen allows the user to set which day each sub criterion will be marked and who will assess each sub criterion. This screen can be accessed from the Marking Scheme menu.



6.4.1 Competitor Groups

Marking for a sub criterion can be split across different days for sets of Competitors. For example, if there are more Competitors than workstations and work is undertaken in shifts, Competitors may complete sub criteria on different days. To make this easier, Competitors can be put into groups to be allocated to sub criteria.



To create a group, the user enters a name for the group then clicks the “Create New Group” button. Competitors are added to the group by selecting them from the list on the left, selecting the group to move them to, then clicking the “Add To Group” button. Individuals can be removed from a group by clicking the red “x” button. To remove a group, the user selects a group from the list on the right and clicks the “Disband Group” button.

6.4.2 Marking Schedule Report

View Marking Schedule

Generate a report that shows who is marking on each day

Create PDF

Once the marking schedule has been set, this report will show which sub criteria are being marked on each day and which people will be marking them.

Marking Schedule 01 Snowman Building WorldSkills Antarctica 2030 Day 1 (01-05-2030)	
Sub Criterion	Marking Team
A1 - Accuracy and scale of Legs	(AA) Expert One (AX) Expert Three (FS) Expert Four (NP) Expert Two (Supervisor)
A3 - Accuracy and scale of Arms	(AA) Expert One (AX) Expert Three (FS) Expert Four (NP) Expert Two (Supervisor)
B1 - Quality of Leg Production	(AA) Expert One (NP) Expert Two (HT) Expert Five (FS) Expert Four (Supervisor)

6.4.3 Marking Day

For each sub criterion a day of marking is required to be set before marks can be entered for that sub criterion.

Allocate marking days and marking teams

For each sub criterion, set which day it is to be marked and who will be marking it.

Sub Criterion	Marking Day	Marking Team
A1	▼	
A2	Day 1 Day 2 Day 3 Any Per Competitor Per Competitor Group	
A3		
A4		

6.4.3.1 Day 1 .. X

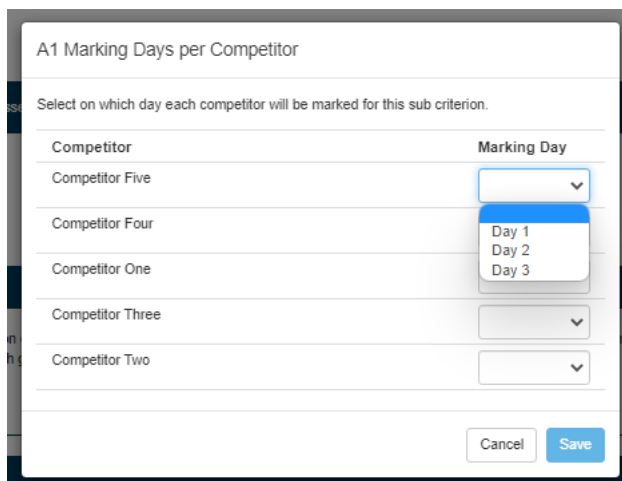
All Competitors will be marked on the selected day for this sub criterion.

6.4.3.2 Any

The sub criterion can be marked on any competition day. The sub criterion will appear on every day in the marking user interface. For the sake of reporting, the sub criterion will appear on the last competition day.

6.4.3.3 Per Competitor

This marking day type is used when Competitors will be marked on different days for this sub criterion. Selecting this option will pop up a window where the marking day can be selected for each Competitor.

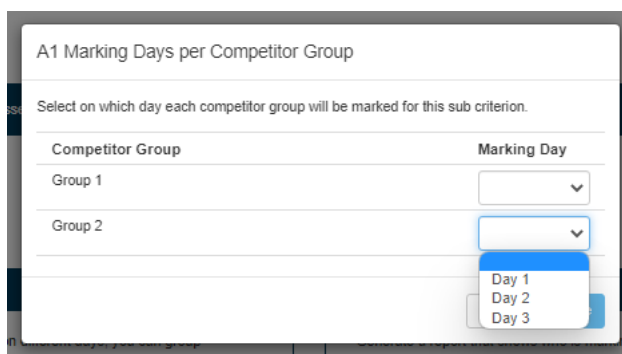


Competitor	Marking Day
Competitor Five	
Competitor Four	Day 1 Day 2 Day 3
Competitor One	
Competitor Three	
Competitor Two	

Cancel Save

6.4.3.4 Per Competitor Group

Similar to the "Per Competitor" option, this marking day type will pop up a window to select the day of marking for each of the Competitor groups defined (see section [6.4.1](#)).



Competitor Group	Marking Day
Group 1	
Group 2	Day 1 Day 2 Day 3

Cancel Save

6.4.4 Marking Team

Each member of the marking team for each sub criterion should be defined on this screen. This ensures that assessors using the tablet or PC marking interface only have access to enter marks for the sub criteria that they are marking. It also ensures an accurate history of who was responsible for assessing each sub criterion.

to be marked and who will be marking it.

Marking Day	Marking Team	Supervisor
Day 1 Edit	(AA) Expert One (AX) Expert Three (FS) Expert Four	(NP) Expert Two x
Day 3 Edit	Add Supervisor	
Per Competitor Group Edit	Add Supervisor	
Day 2 Edit	Add Supervisor	
Per Competitor Edit	Same as A1 (AA) Expert One (AX) Expert Three (FS) Expert Four (HT) Expert Five (NP) Expert Two	Add Supervisor
Day 2 Edit		Add Supervisor
Day 3 Edit		Add Supervisor

To add a member of the marking team, select them from the dropdown and click the “Add” button. For the Supervisor position, select the person and click the “Supervisor” button.

To remove someone from the marking team, click the red “x” button.

Once a marking team has been defined, it can be copied to other sub criteria. To use the same marking team as another sub criterion, select the “Same as ...” item from the dropdown and click the “Add” button.

7 During the Competition

7.1 Marking Forms

CIS can generate a number of different PDF forms related to marking, such as forms for Experts to record marks on while marking, forms with completed marks as recorded in the CIS, and a number of signoff forms that are used to record Experts' approval of marking schemes and mark entry.

The Marking Forms screen can be access from the Assessment menu.

7.1.1 Marking Scheme

The Marking Scheme form creates a single set of marking forms for a skill, filled with the information entered in marking scheme (see section 6.2). The marking forms generated do not hold any Competitor information or marking day information where "Per Competitor" or "Per Competitor Group" have been selected.

WorldSkills Antarctica 2030

System ▾
Competition ▾
Marking Scheme ▾
Assessment ▾
Results ▾
Reports ▾

Marking Forms

Generate marking form

Form Type

Skill

Sub Criterion

Marking scheme

01 Snowman Building

All Sub Criteria

[Create PDF](#)

The marking form for a single sub criterion can be generated by selecting the desired sub criterion from the dropdown.

Marking Form
WorldSkills Antarctica 2030

Skill 01 - Snowman Building

Sub Criterion A1 - Accuracy and scale of Legs

Competitor _____

Marking Team (NP) Expert Two, (AA) Expert One, (AX) Expert Three, (FS) Expert Four

Competition Day 1 Marking Scheme Lock 23-03-2023 12:56:08 Mark Entry Lock _____



JUDGEMENT MARKING						
Aspect ID	Max Mark	Aspect of Sub Criterion - description	Requirement	Result or Actual Value	Expert Score (0 to 3)	Mark Awarded
J1	1.00	Smoothness of Appearance of Right Leg			(AA) Expert One	
		0 - Surface not smooth and many surface defects. Tooling marks visible			(AX) Expert Three	
		1 - Surface is smooth but may have some tooling marks			(FS) Expert Four	
		2 - Surface is smooth but with some tooling marks				
		3 - Surface is smooth and without any tooling defects or marks				
J2	1.00	Smoothness of Appearance of Left Leg			(AA) Expert One	
		0 - Surface not smooth and many surface defects. Tooling marks visible			(AX) Expert Three	
		1 - Surface is smooth but may have tooling marks			(FS) Expert Four	
		2 - Surface is smooth but with some tooling marks				
		3 - Surface is smooth and without any tooling defects or marks				
MEASUREMENT MARKING						
Aspect ID	Max Mark	Aspect of Sub Criterion - description	Requirement	Result or Actual Value	Expert Score (0 to 3)	Mark Awarded
M1	1.50	Length of Right Leg Axle to Pelvis and of course this Aspect could be longer than one line of information This is the area where additional information for marking an aspect can be entered	800 +/- 5mm			
M2	0.50	Diameter of Right Leg at Calf	100mm +/- 5mm			
M3	2.00	Diameter of Right Leg at Thigh	150mm +/- 5mm			

If the marking scheme has not been locked, a “Draft” watermark is added to all pages to indicate that the marking scheme has not been finalised.

Marking Form
WorldSkills Antarctica 2030

Skill: 01 - Snowman Building

Sub Criterion: A1 - Accuracy and scale of Legs

Competitor: (NP) Expert Two, (AA) Expert One, (AX) Expert Three, (FS) Expert Four

Competition Day: 1 Marking Scheme Lock Mark Entry Lock

JUDGEMENT MARKING				
Aspect ID	Max Mark	Aspect of Sub Criterion - description	Expert Score (0 to 3)	Mark Awarded
J1	1.00	Smoothness of Appearance of Right Leg 0 - Surface not smooth and many surface defects. Tooling marks visible 1 - Surface is smooth but may have some tooling marks 2 - Surface is smooth but with some tooling marks 3 - Surface is smooth and without any tooling defects or marks	(AA) Expert One (AX) Expert Three (FS) Expert Four	
J2	1.00	Smoothness of Appearance of Left Leg 0 - Surface not smooth and many surface defects. Tooling marks visible 1 - Surface is smooth but may have tooling marks 2 - Surface is smooth but with some tooling marks 3 - Surface is smooth and without any tooling defects or marks	(AA) Expert One (AX) Expert Three (FS) Expert Four	

MEASUREMENT MARKING					
Aspect ID	Max Mark	Aspect of Sub Criterion - description	Requirement	Result or Actual Value	Mark Awarded
M1	1.50	Length of Right Leg Ankle to Pelvis and of course this Aspect could be longer than one leg of information This is the area where additional information for marking an aspect can be entered	800 +/- 5mm		
M2	0.50	Diameter of Right Leg at Calf	100mm +/- 5mm		

7.1.2 Mark Summary Form

The Mark Summary Form shows when each sub criterion is marked for a Competitor and how many marks are allocated to the sub criterion.

WorldSkills Anta

System Competition Marking Scheme Assessment Results Reports

Marking Forms

Generate marking form

Form Type: Mark Summary form

Skill: 01 Snowman Building

Competitor: All Competitors

Competition Day: All Days

Create PDF

The form can be filtered by Competitor and by competition day.

Mark Summary Form
WorldSkills Antarctica 2030

Skill: 01 - Snowman Building

Competitor: (AA) Competitor One

Marking Scheme Lock: 23-03-2023 12:56:08 Final Mark Lock

ID	Description	Day 1	Day 2	Day 3
A	Accuracy and Scale of Main Components	14.00	6.00	6.00
A1	Accuracy and scale of Legs	10.00		
A2	Accuracy and scale of Body			6.00
A3	Accuracy and scale of Arms	4.00		
A4	Accuracy and scale of Head and Neck		6.00	
B	Design and Appearance of Extremities & Facial Elements	4.50	5.00	4.50
B1	Quality of Leg Production	4.50		
B2	Quality of Body Production		2.50	
B3	Quality of Arm Production			4.50
B4	Quality of Head and Neck Production			2.50

7.1.3 Marking Forms for Hand-Written Marks

This set of forms is for the assessors to use when recording marks.

WorldSkills Antarctica 2030

System Competition Marking Scheme Assessment Results Reports

Marking Forms

Generate marking form

Form Type	Marking forms for hand-written marks
Skill	01 Snowman Building
Sub Criterion	All Sub Criteria
Competitor	All Competitors
Competition Day	All Days
Collate Marking Forms By	Sub Criterion
Hide Requirements for Measurement Aspects	☐

[Create PDF](#)

The marking forms can be filtered by sub criterion, Competitor, and competition day. The forms can be collated by sub criterion, Competitor, or competition day.

The “Hide Requirements for Measurement Aspects” hides the requirements field. This is usually used when the Competitors receive a copy of the marking forms.

Competitor and marking team information is shown at the top of the form.

Marking Form

WorldSkills Antarctica 2030



Skill	01 - Snowman Building		
Sub Criterion	A1 - Accuracy and scale of Legs		
Competitor	(AA) Competitor One		
Marking Team	(NP) Expert Two, (AA) Expert One, (AX) Expert Three, (FS) Expert Four		
Competition Day	1	Marking Scheme Lock	24-03-2023 00:08:50
		Mark Entry Lock	

JUDGEMENT MARKING

Aspect ID	Max Mark	Aspect of Sub Criterion - description	Expert Score (0 to 3)	Mark Awarded
J1	1.00	Smoothness of Appearance of Right Leg 0 - Surface not smooth and many surface defects. Tooling marks visible 1 - Surface is smooth but may have some tooling marks 2 - Surface is smooth but with some tooling marks 3 - Surface is smooth and without any tooling defects or marks	(AX) Expert Three (FS) Expert Four (NP) Expert Two	

7.1.5 Marking Forms with Completed Marks

This option creates the same set of forms as Marking Forms for Hand-Written Marks but also includes the assessment information for each Competitor. This includes marks, scores, measurements, comments and photos.

WorldSkills Antarctica 2030

System Competition Marking Scheme Assessment Results Reports

Marking Forms

Generate marking form

Form Type	Marking forms with completed marks
Skill	01 Snowman Building
Sub Criterion	All Sub Criteria
Competitor	All Competitors
Competition Day	All Days
Collate Marking Forms By	Sub Criterion
Hide comments from marking teams	☐

[Create PDF](#)

The marking forms can be filtered by sub criterion, Competitor, and competition day. The forms can be collated by sub criterion, Competitor, or competition day.

The forms can also optionally be generated with comments from the marking team hidden.

Marking Form

WorldSkills Antarctica 2030



Skill	01 - Snowman Building				
Sub Criterion	A1 - Accuracy and scale of Legs				
Competitor	(AA) Competitor One				
Marking Team	(NP) Expert Two, (AA) Expert One, (AX) Expert Three, (FS) Expert Four				
Competition Day	1	Marking Scheme Lock	24-03-2023 00:08:50	Mark Entry Lock	24-03-2023 11:31:37

JUDGEMENT MARKING

Aspect ID	Max Mark	Aspect of Sub Criterion - description	Expert Score (0 to 3)	Mark Awarded
J1	1.00	Smoothness of Appearance of Right Leg 0 - Surface not smooth and many surface defects. Tooling marks visible 1 - Surface is smooth but may have some tooling marks 2 - Surface is smooth but with some tooling marks 3 - Surface is smooth and without any tooling defects or marks	(AX) Expert Three 2 (FS) Expert Four 2 (NP) Expert Two 1	0.56
J2	1.00	Smoothness of Appearance of Left Leg 0 - Surface not smooth and many surface defects. Tooling marks visible 1 - Surface is smooth but may have tooling marks 2 - Surface is smooth but with some tooling marks 3 - Surface is smooth and without any tooling defects or marks	(AX) Expert Three 3 (FS) Expert Four 3 (NP) Expert Two 2	0.89

MEASUREMENT MARKING

Aspect ID	Max Mark	Aspect of Sub Criterion - description	Requirement	Result or Actual Value	Mark Awarded
M1	1.50	Length of Right Leg Ankle to Pelvis and of course this Aspect could be longer than one line of information This is the area where additional information for marking an aspect can be entered	800 +/- 5mm	802	0.90
M2	0.50	Diameter of Right Leg at Calf	100mm +/- 5mm	108	0.00
M3	2.00	Diameter of Right Leg at Thigh	150mm +/- 5mm	152	1.40
M4	1.50	Length of Left Leg Ankle to Pelvis	800 +/- 5mm	796	0.30
M5	0.50	Diameter of Left Leg at Calf	100mm +/- 5mm	100	0.50

If marks have not yet been locked (see section 7.6), a “Results Incomplete” watermark is added to all pages to indicate that the marks have not been finalised.

Marking Form					
WorldSkills Antarctica 2030					
Skill	01 - Snowman Building				
Sub Criterion	A1 - Accuracy and scale of Legs				
Competitor	(AX) Competitor Three				
Marking Team	(NP) Expert Two, (AA) Expert One, (AX) Expert Three, (FS) Expert Four				
Competition Day	1	Marking Scheme Lock	24-03-2023 00:08:50	Mark Entry Lock	
JUDGEMENT MARKING					
Aspect ID	Max Mark	Aspect of Sub Criterion - description	Expert Score (0 to 3)	Mark Awarded	
J1	1.00	Smoothness of Appearance of Right Leg 0 - Surface not smooth and many surface defects. Tooling marks visible 1 - Surface is smooth but may have some tooling marks 2 - Surface is smooth but with some tooling marks 3 - Surface is smooth and without any tooling defects or marks	(AA) Expert One (FS) Expert Four (NP) Expert Two	2 2 3	0.78
J2	1.00	Smoothness of Appearance of Left Leg 0 - Surface not smooth and many surface defects. Tooling marks visible 1 - Surface is smooth but may have some tooling marks 2 - Surface is smooth but with some tooling marks 3 - Surface is smooth and without any tooling defects or marks	(AA) Expert One (FS) Expert Four (NP) Expert Two	0 0 0	0.00
MEASUREMENT MARKING					
Aspect ID	Max Mark	Aspect of Sub Criterion - description	Requirement	Result or Actual Value	Mark Awarded
M1	1.50	Length of Right Leg Ankle to Pelvis and of course this Aspect could be longer than one line of information This is the area where additional information for marking an aspect can be entered	800 +/- 5mm	800	1.50
M2	0.50	Diameter of Right Leg at Calf	100mm +/- 5mm	811	0.00
M3	2.00	Diameter of Right Leg at Thigh	150mm +/- 5mm	165	0.50
M4	1.50	Length of Left Leg Ankle to Pelvis	800 +/- 5mm	No Attempt	0.00
Comments from Assessors No attempt was made at completing the left leg					

7.1.6 Sign off Form for Marking Scheme

This form is a PDF document that lists each Expert for the skill and provides a space for them leave a signature to indicate their approval of the marking scheme. This form can only be generated once the marking scheme has been locked.

WorldSkills Antarctica 2030

System ▾ Competition ▾ Marking Scheme ▾ Assessment ▾ Results ▾ Reports ▾

Marking Forms

Generate marking form

Form Type Skill	Sign off form for Marking Scheme 01 Snowman Building Create PDF
--------------------	--

At the top of the form is the timestamp of when the marking scheme was locked. This timestamp also appears on each of the marking forms. This enables the assessor to check that the aspects on the marking forms are identical to the ones signed off by the Experts. If the timestamps do not match, then the marking scheme has been unlocked and altered since the Experts signed the form. Minor adjustments can be made to the marking scheme after locking, and these are tracked and can be signed off on the Changed Marking Scheme form (see section [7.1.9](#)).

Marking Scheme Acceptance

WorldSkills Antarctica 2030

Skill Number 01
Skill Name Snowman Building

Timestamp 24-03-2023 00:08:50

Signature	
AA - Expert One	
FS - Expert Four	
NP - Expert Two	

Signature	
AX - Expert Three	
HT - Expert Five	

I, the undersigned Skill Competition Manager, confirm that the above Experts agree with the Marking Scheme and this number of Experts represents a majority.

Skill Competition Manager

7.1.7 Sign off Form for Mark Entry

This form is a PDF document that lists each Expert for the skill and provides a space for them leave a signature to indicate their approval that marks for their compatriot Competitor have been entered into CIS correctly.

WorldSkills Antarctica 2030

System Competition Marking Scheme Assessment Results Reports

Marking Forms

Generate marking form

Form Type Skill Competition Day	Sign off form for Mark Entry 01 Snowman Building Day 1 Create PDF
---------------------------------------	--

The user can select which day they would like to generate the form for. Days will only appear in the drop down once all marks have been locked for that day.

Mark Entry Acceptance

Day 1

WorldSkills Antarctica 2030

Skill Number 01

Skill Name Snowman Building

Sub Criterion <u>A1</u>	Timestamp <u>24-03-2023 11:31:37</u>
Sub Criterion <u>A3</u>	Timestamp <u>24-03-2023 12:55:24</u>
Sub Criterion <u>B1</u>	Timestamp <u>24-03-2023 12:55:25</u>
Sub Criterion <u>C2</u>	Timestamp <u>24-03-2023 12:55:26</u>
Sub Criterion <u>E3</u>	Timestamp <u>24-03-2023 12:55:27</u>
Sub Criterion <u>G1</u>	Timestamp <u>24-03-2023 12:55:28</u>

Signature
AA - Expert One
FS - Expert Four
NP - Expert Two

Signature
AX - Expert Three
HT - Expert Five

I, the undersigned Skill Competition Manager, confirm that all Experts are satisfied with the correct mark entry, have not raised any related issues and that due process has been followed.

Skill Competition Manager

At the top of the form is a list of sub criteria marked that day and the timestamp of when the mark entry was locked for that sub criterion. This timestamp also appears on each of the marking forms. This allows each Expert to check that the marks on the marking forms are the same as the ones signed off by the Experts. If the timestamps do not match, then the marks may have been altered in some way since the Experts signed the form.

7.1.8 Sign off Form for Changed Marks

Once assessment for a sub criterion has been completed, all the marks should be locked so that no further changes can be made to the marks (see section 7.6). Occasionally after marks have been locked it becomes apparent that a mistake has been made in the recording of the marks, measurements, or scores and it is necessary to unlock the marks to make adjustments. These changes are tracked by CIS.

The CIS can generate a form that lists all the changes made since the marks were locked and provides a signature box for the marking team, the compatriot Expert of the affected Competitors, and the Chief Expert.

WorldSkills Antarctica 2030

System Competition Marking Scheme Assessment Results Reports

Marking Forms

Generate marking form

Form Type Skill Sub Criterion Competition Day	Sign off form for Changed Marks 01 Snowman Building All Sub Criteria Day 1 Create PDF
--	--

The form can be created by competition day and filtered by individual sub criterion.

Changed Marks Acceptance

Day 1

WorldSkills Antarctica 2030

Skill Number 01 **Skill Name** Snowman Building

Sub Criterion A1 Accuracy and scale of Legs

Unlocked 24-03-2023 13:03:00

Locked 24-03-2023 13:03:39

Reason There was a mistake during data entry for Competitor One

Marks Changed	Competitor	Aspect	Expert / Measurement	Score / Mark
	(AA) Competitor One	A1.M2	103.00	
	(AA) Competitor One	A1.M2	101.00	

We the undersigned Experts confirm that the mark changes identified above have been correctly entered

Signature

AA - Expert One

FS - Expert Four

Signature

AX - Expert Three

NP - Expert Two

Chief Expert

The form shows when the date and time of when each sub criterion was unlocked and then re-locked. It shows the reason entered as to why the sub criterion was unlocked, and the individual items that were changed.

7.1.9 Sign off Form for Changed Marking Scheme

If the marking scheme has been opened for updates after marks have been entered (see section [6.2.5](#)), the CIS will track any changes that have been made. A form can be generated listing these changes and provides a sign off field for Experts to acknowledge the changes.

WorldSkills Antarctica 2030

System - Competition - Marking Scheme - Assessment - Results - Reports -

Marking Forms

Generate marking form

Form Type Skill	Sign off form for Changed Marking Scheme 01 Snowman Building Create PDF
--------------------	---

The form displays all the changes that have occurred and the date and time of change.

Changed Marking Scheme Acceptance

WorldSkills Antarctica 2030

Skill Number 01
Skill Name Snowman Building

Marking Scheme Locked 24-03-2023 00:08:50

25-03-2023 00:48:31	Aspect definition changed	G2.J3 - Appropriateness of Colours Used
25-03-2023 00:48:32	Aspect definition changed	G2.J3 - Appropriateness of Colours Used
25-03-2023 00:52:38	Aspect definition changed	G2.J3 - Appropriateness of Colours Used

Signature

AA - Expert One

FS - Expert Four

NP - Expert Two

Signature

AX - Expert Three

HT - Expert Five

Skill Competition Manager

7.2 Mark Data Entry

Marks and other assessment data that has been recorded on a paper marking form can be transcribed into the CIS on the Mark Data Entry screen. This can be accessed from the Assessment menu.

WorldSkills Antarctica 2030

worldskills

System - Competition - Marking Scheme - Assessment - Results - Reports - Admin User -

Mark Data Entry

Select a skill 01 Snowman Build... x



Aspects marked for this sub criterion	12 / 12
Total marks/scores entered	38 / 127

AA - Competitor One

Day 1

A1 - Accuracy and scale of Legs

Judgement Marking Form

Aspect	Description		Scores (0 - 3)	Mark Awarded
A1.J1	Smoothness of Appearance of Right Leg	(AX) Expert Three	2	0.56 / 1.00
		(FS) Expert Four	2	
		(NP) Expert Two	1	
A1.J2	Smoothness of Appearance of Left Leg	(AX) Expert Three	3	0.89 / 1.00
		(FS) Expert Four	3	
		(NP) Expert Two	2	
Total				1.45 / 2.00

Measurement Marking Form

Aspect	Description	Requirements	Measurement		Mark Awarded
A1.M1	Length of Right Leg Ankle to Pelvis and of course this Aspect could be longer than one line of information	800 +- 5mm	802	No Attempt ☐	0.90 / 1.50
A1.M2	Diameter of Right Leg at Calf	100mm +- 5mm	101	No Attempt ☐	0.20 / 0.50
A1.M3	Diameter of Right Leg at Thigh	150mm +- 5mm	152	No Attempt ☐	1.40 / 2.00
A1.M4	Length of Left Leg Ankle to Pelvis	800 +- 5mm	795	No Attempt ☐	0.30 / 1.50

7.2.1 Navigation

The first section of the Mark Data Entry screen provides tools for selecting the Competitor, competition day, and sub criterion. Changes to these selections will update the data in the marking forms.



Aspects marked for this sub criterion	12 / 12
Total marks/scores entered	38 / 127

AA - Competitor One

Day 1

A1 - Accuracy and scale of Legs

The bordered section contains information relating to the selected Competitor. It shows the number of aspects marked for the currently selected sub criterion, as well as the number of marks entered for the Competitor for the entire skill. If an image has been uploaded for the Competitor it will appear here.

The current Competitor can be selected from the dropdown box, or the list of competitors can be navigated by pressing the left and right buttons either side of the dropdown.

Similarly, the competition day can be selected from the dropdown or navigated with the left and right buttons.

The sub criterion selection dropdown contains a list of sub criteria available for the selected Competitor on the selected competition day. This information is drawn from the marking schedule (see section 6.4). Changing the selected Competitor or competition day may result in a different list of sub criteria in the dropdown box.

7.2.2 Judgement Mark Entry

Judgement Marking Form			
Aspect	Description	Scores (0 - 3)	Mark Awarded
A1.J1	 Smoothness of Appearance of Right Leg	(AX) Expert Three: 2 (FS) Expert Four: 2 (NP) Expert Two: 1	0.56 / 1.00 
A1.J2	 Smoothness of Appearance of Left Leg	(AX) Expert Three: 2 (FS) Expert Four: 1 (NP) Expert Two: 0	 / 1.00 
		Total	0.56 / 2.00

The Judgement Marking Form is for transcribing the judgement scores awarded by the marking team.

On the left is the aspect identifier and a description of the aspect. Clicking the plus icon  expands the description to show any extra description lines that have been added for the aspect and the judgment benchmarks for the aspect. Clicking the minus icon  will hide the extra descriptions.

Judgement Marking Form	
Aspect	Description
A1.J1	 Smoothness of Appearance of Right Leg
A1.J2	 Smoothness of Appearance of Left Leg
	0 Surface not smooth and many surface defects. Tooling marks visible 1 Surface is smooth but may have tooling marks 2 Surface is smooth but with some tooling marks 3 Surface is smooth and without any tooling defects or marks

On the right side of the form is where scores from the marking team are entered.

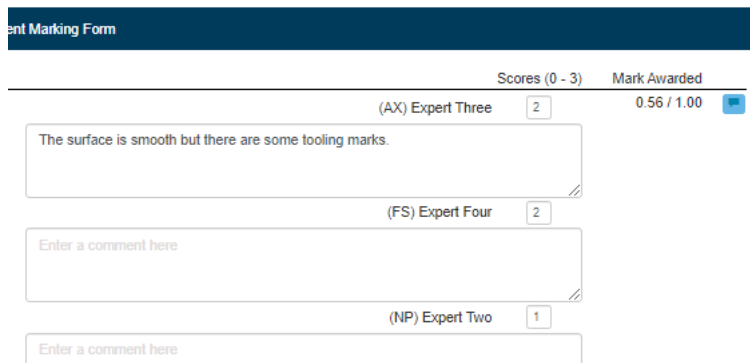
Scores (0 - 3)		Mark Awarded
(AX) Expert Three	2	0.56 / 1.00 
(FS) Expert Four	2	
(NP) Expert Two	1	
(AX) Expert Three	2	 / 1.00 
(FS) Expert Four		
(NP) Expert Two		
Total		0.56 / 2.00

Each of the marking team defined in the marking schedule (see section 6.4) are listed and a field provided for entering their score. Where no marking team has been defined, the names are "Judge 1", "Judge 2" and "Judge 3".

The score fields accept values in the range of 0 – 3. The fields can be navigated by using the up and down arrow keys for faster data entry. Scores are saved as they changed. If an invalid score is entered the aspect will be highlighted in red.

The Mark Awarded section shows the calculated mark produced by the three judgement scores. If the scores are incomplete a clock icon is displayed, indicating that the CIS is waiting for three valid scores.

The speech bubble icon  at the end of the row expands a text field for entering comments from each of the marking team. The speech bubble icon will be blue if there are comments present.



The screenshot shows a 'Judgement Marking Form' with a table of scores. The table has columns for 'Scores (0 - 3)' and 'Mark Awarded'. The first row shows '(AX) Expert Three' with a score of 2 and a mark awarded of 0.56 / 1.00. Below this is a text box with the comment 'The surface is smooth but there are some tooling marks.' The second row shows '(FS) Expert Four' with a score of 2 and a text box with the placeholder 'Enter a comment here'. The third row shows '(NP) Expert Two' with a score of 1 and a text box with the placeholder 'Enter a comment here'.

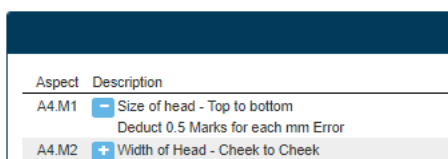
It is important to note that entering judgement scores in this form will remove any judgement marking that may be in progress for the same aspect and Competitor being done on the tablet interface. For example, if aspect A1.J1 has two scores entered for Competitor A via the tablet interface and then the third Expert's score is entered via the mark entry screen, the original two scores will be removed. This is because scores entered the tablet or PC marking interface go into a holding area until three valid scores are received. Scores entered via the mark entry interface are considered to be final and valid, so the holding area is cleared for the corresponding aspect.

7.2.3 Measurement Mark Entry

Measurement Marking Form				
Aspect	Description	Requirements	Measurement	Mark Awarded
A4.M1	 Size of head - Top to bottom	250mm +/- 10mm		/ 1.00 
A4.M2	 Width of Head - Cheek to Cheek	160mm +/- 5mm		/ 1.00 
A4.M3	 Depth of Head - Forehead to Back of Head	200mm +/- 5mm		/ 2.00 
A4.M4	 Length of Neck	70mm +/- 5mm		/ 1.50 
A4.M5	 Diameter of Neck	120mm +/- 7mm		/ 0.50 
Total				0.00 / 6.00

The Measurement Marking Form is for transcribing the measurements and marks awarded by the marking team for measurement aspects.

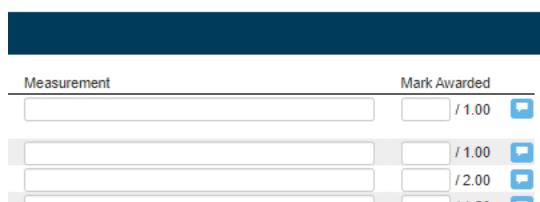
Similar to the Judgement Marking Form, the left side of the form contains the aspect identifier and description of the aspect. If any extra description lines have been added to the aspect, a plus icon  will be present. Clicking the icon will expand the description to show the extra lines. Clicking the minus button  will hide the extra description text.



The screenshot shows a detail view of the Measurement Marking Form. It lists two aspects: A4.M1 'Size of head - Top to bottom' with a plus icon and a minus icon, and A4.M2 'Width of Head - Cheek to Cheek' with a plus icon. The description for A4.M1 is expanded to show 'Deduct 0.5 Marks for each mm Error'.

The middle of the form contains the requirements for the measurement aspect.

The right side of the form contains fields for entering measurement and mark information. The arrow keys can be used to move between the form fields.



The screenshot shows the input fields for the Measurement Marking Form. It has columns for 'Measurement' and 'Mark Awarded'. The first row shows a measurement field and a mark awarded field of / 1.00. The second row shows a measurement field and a mark awarded field of / 1.00. The third row shows a measurement field and a mark awarded field of / 2.00. The fourth row shows a measurement field and a mark awarded field of / 1.50.

The measurement field is a text field for entering any measurement information recorded. The mark awarded field is for recording the mark that the Competitor was awarded by the marking team. While these marks can be entered by typing the digits, there are some shortcuts if the Competitor received full marks or zero marks. Typing “y” or “+” into the mark field will award the Competitor full marks for the aspect. Typing “n” or “-” into the mark field will award the Competitor zero marks. This allows the marks to be entered quickly by simply typing a single character then pressing the down arrow to move to the next one.

Like the Judgement Marking Form, the speech bubble icon  at the end of the row expands a text field for entering comments from the marking team. The speech bubble icon will be blue if there are comments present.

Measurement Marking Form			
Aspect	Description	Requirements	Measurement
A4.M1	 Size of head - Top to bottom	250mm +/- 10mm	/ 1.00 
Enter a comment here			
A4.M2	 Width of Head - Cheek to Cheek	160mm +/- 5mm	/ 1.00 
A4.M3	 Depth of Head - Forehead to Back of Head	200mm +/- 5mm	/ 0.00 

Measurement aspects that have been configured with CIS calculations (see section [6.3](#)) have a slightly different form. For these aspects the mark cannot be entered directly. The mark is determined from the measurement value according to the configuration of the calculation. The measurement value can only be a number.

The mark awarded is shown once the calculation has all the data that it needs to produce a result. For some calculation types the marks cannot be calculated until the measurements for every Competitor have been entered for that aspect.

Measurement	No Attempt	Mark Awarded
	☐	 / 1.50 
101	☐	0.20 / 0.50 
0	☒	0.00 / 2.00 

If a Competitor has not produced any work than can be measured, the “No Attempt” checkbox can be ticked to give the Competitor zero marks for the aspect.

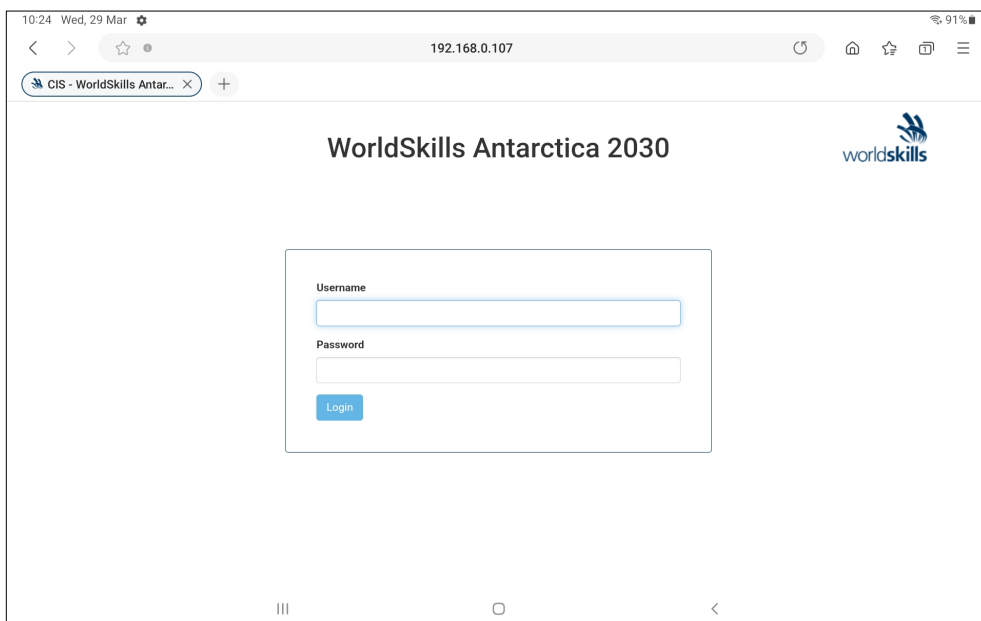
7.3 Tablet Marking

As an alternative to marking on paper marking forms, the CIS has a user interface designed for iPad and Android tablets to facilitate paperless marking. No apps or special software is required to be installed to use the CIS from a tablet. The web browser that is supplied “out of the box” with the tablet (or any other web browser) can be used to connect to the normal CIS URL. The CIS will detect that a tablet is being used and supply the appropriate user interface.

The tablet can be held in either portrait or landscape orientation.

7.3.1 Login

Upon connecting to the CIS with the tablet’s web browser, the login screen will be presented. Users can login with the same username and password as the PC interface.



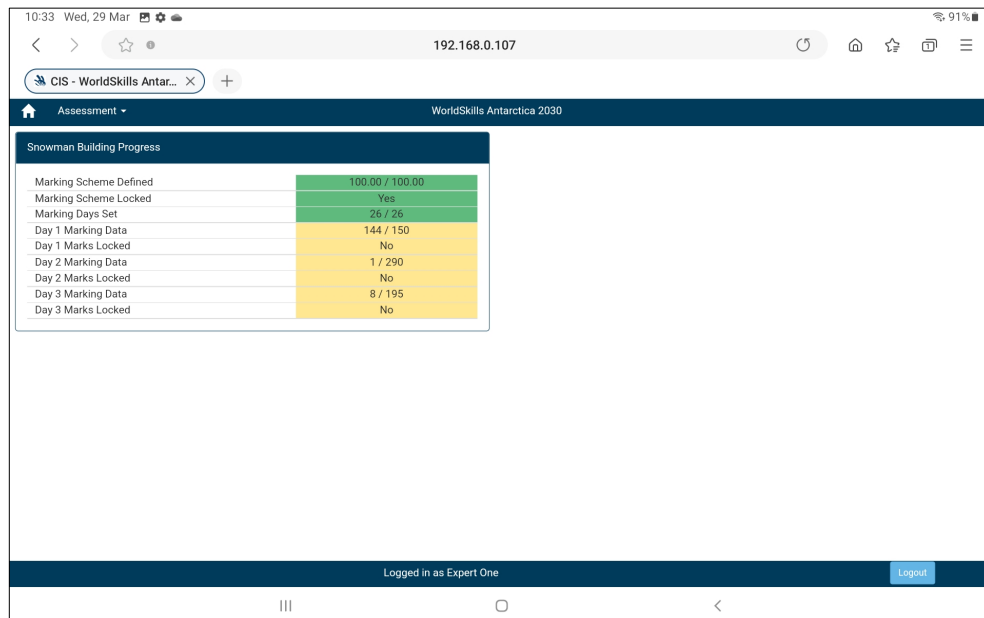
The screenshot shows a web browser interface on a tablet. The address bar displays the URL 192.168.0.107. The page title is "CIS - WorldSkills Antar...". The main content area features the "WorldSkills Antarctica 2030" logo and a login form. The login form contains two input fields: "Username" and "Password", followed by a blue "Login" button. The WorldSkills logo is also present in the top right corner of the page.

7.3.2 Menu

The header of the user interface contains a menu bar with a home button and an Assessment menu.



The home button will show Experts a dashboard with current progress of assessment for their skill.



For users with the “Allow PC user interface on mobile device” permission they will also see a link to switch from the tablet user interface to the full featured PC interface.

The Logout button is located at the bottom right of the screen.

7.3.3 Marking

Upon successful login, the user will be redirected to the marking screen for their skill.

If the user is on another screen, the marking screen can be accessed from the Assess Competitors menu item from the Assessment menu.

7.3.3.1 Navigation

Snowman Building

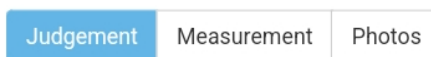


The first dropdown is for selection of the competition day. This will default to the current competition day, or if being accessed outside of the competition dates will default to day 1. The left and right arrows either side of the dropdown allow navigating backwards and forward through the list.

The current Competitor can be selected from the dropdown box on the right of the screen, or the list of competitors can be navigated by pressing the left and right buttons either side of the dropdown.

The sub criterion selection dropdown on the bottom left contains a list of sub criteria available for the selected Competitor on the selected competition day. This information is drawn from the marking schedule (see section [6.4](#)). Changing the selected Competitor or competition day may result in a different list of sub criteria in the dropdown box. Users will only see the sub criteria where they are a member of the marking team. All other sub criteria will be hidden.

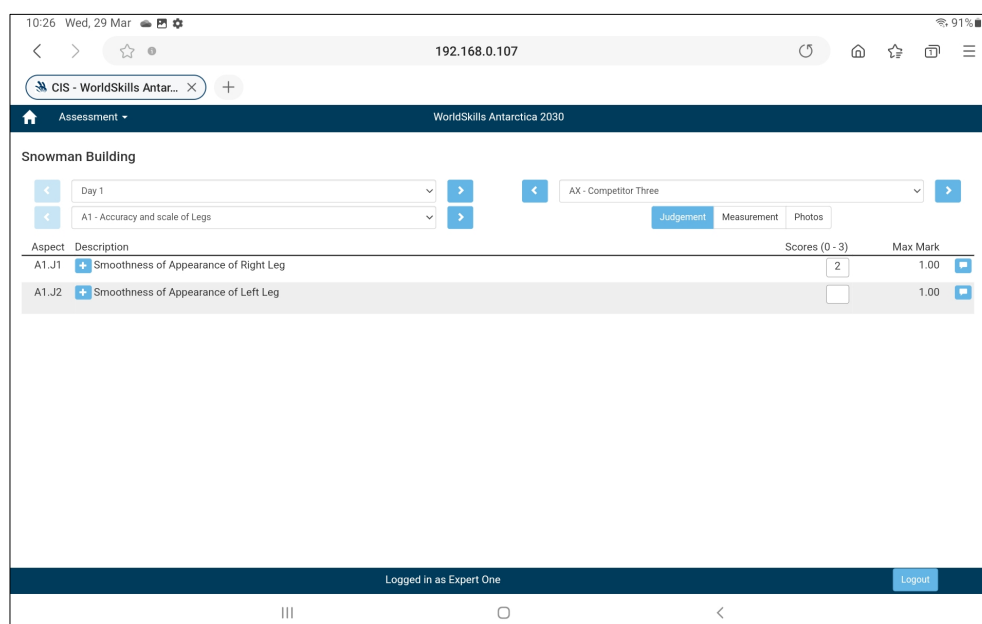
On the bottom right of the navigation header is the assessment type selector.



If judgement aspects are present in the selected sub criterion there will be a judgement button. If there are measurement aspects in the selected sub criterion there will be a measurement button. If photographs have been permitted on the config page (see section [4.5.2.9](#)) there will be a photos button.

7.3.3.2 Judgement Marking

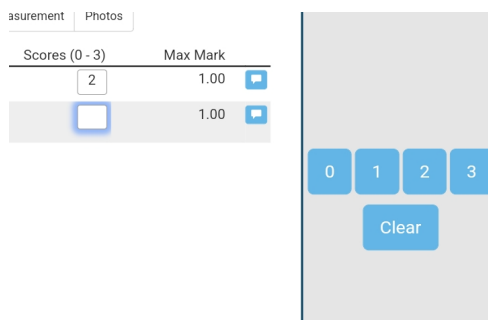
Assessors will only have access to enter their own score for each judgement aspect. Since each assessor is required to enter their own judgement scores, it is usually most efficient for each member of the marking team to have their own device for entering scores.



Aspect	Description	Scores (0 - 3)	Max Mark
A1.J1	Smoothness of Appearance of Right Leg	2	1.00
A1.J2	Smoothness of Appearance of Left Leg		1.00

The plus icon  will expand to show the judgement benchmarks for each score for the aspect, as well as any extra description lines added in the marking scheme. Pressing the minus icon  will hide the benchmarks and descriptions.

When the score entry field is touched, a keypad will slide in from the right (or from the bottom if the tablet is being held in portrait mode).



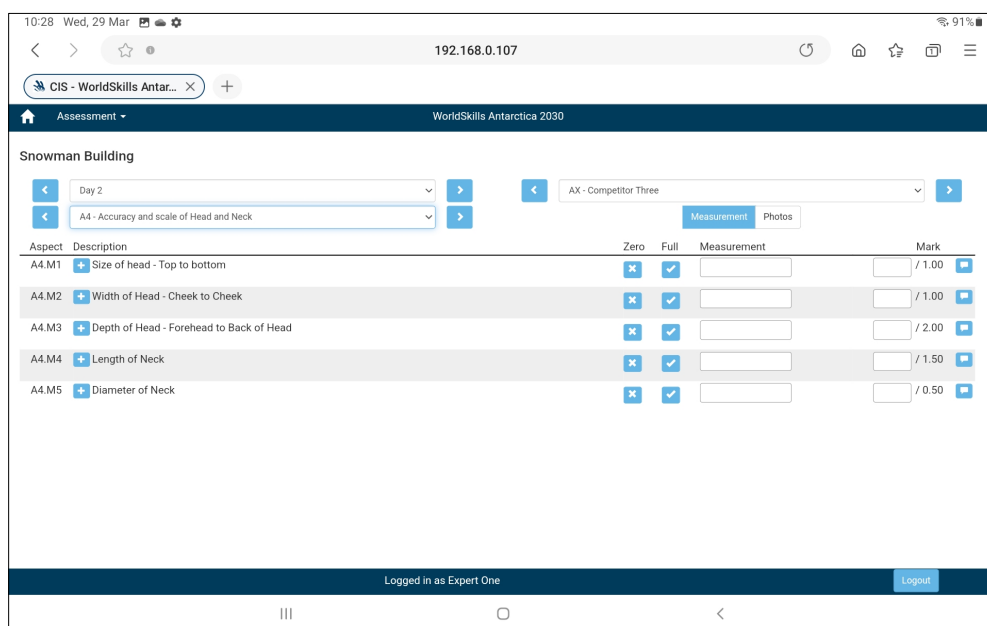
Tap the relevant number to set a score, or clear to remove a score.

Tapping the speech bubble icon  will expand a comments field, allowing the marker to give further feedback and explain why a particular score was given. The speech bubble icon will turn blue when a comment is present.

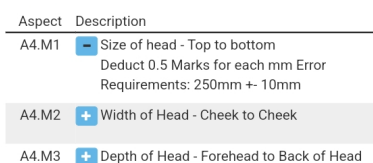


7.3.3.3 Measurement Marking

Any member of the marking team can enter measurement marks.



The plus icon  will expand to show any extra description lines added in the marking scheme. Pressing the minus icon  will hide the extra description text.



The right side of the screen is where marks are entered.

Zero	Full	Measurement	Mark
☐	☒		/ 1.00 

The cross icon  will award the Competitor zero marks for the aspect. The tick icon  will award full marks for the aspect. The Measurement field allows the marker to enter data about any measurements taken. The Mark field allows a specific mark to be entered. When the mark entry field is touched, a keypad will slide in from the right (or from the bottom if the tablet is being held in portrait mode).

ent Photos

Zero	Full	Measurement	Mark
☐	☒	1.00	1.00 / 1.00 
☐	☐		/ 1.00 
☐	☐		/ 2.00 
☐	☐		/ 1.50 
☐	☐		/ 0.50 

1 2 3 4

5 6 7 8

9 0 .

Clear

Marks can be entered using the keypad. The “Clear” button will remove marks from the field. The mark is saved when the focus shifts away from the form field.

For measurement aspects that make use of the CIS calculations (see section 6.3), the only data that can be entered is in the Measurement field, or ticking the No Attempt field if the Competitor did not complete that aspect.

Zero	Full	Measurement	No Attempt	Mark
☐	☐	800	☐	1.50 / 1.50 
☐	☐	811	☐	0.00 / 0.50 
☐	☐		☐	 / 2.00 
☐	☐	0	☒	0.00 / 1.50 
☐	☐	0	☒	0.00 / 0.50 

The Mark value is calculated based on the data in the measurement field. Where the CIS does not have enough data to calculate the mark, a clock icon will be displayed. The No Attempt field will set the mark value to zero for that aspect.

As with judgement aspects, the tapping the speech bubble icon  will reveal a field for the marker to enter further comments about the Competitor’s work.

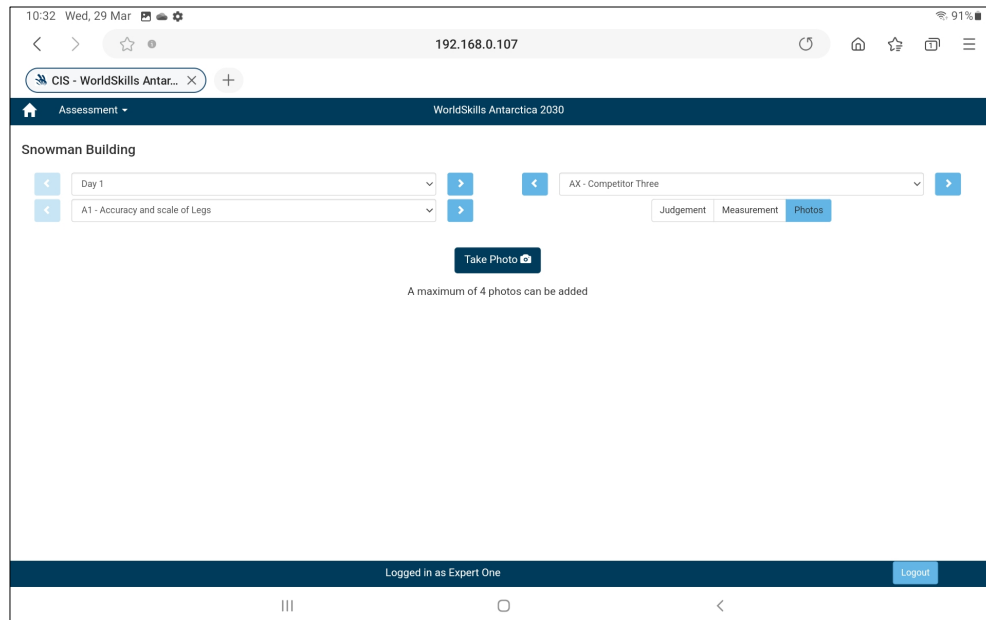
Aspect	Description	Zero	Full	Measurement	Mark
A4.M1	 Size of head - Top to bottom	☒	☒		1.00 / 1.00 
Head is well formed					

The speech bubble icon will be blue where there is a comment present.

7.3.3.4 Photographs

If photographs have been enabled in the config (see section [4.5.2.9](#)) then markers will be able to take photographs with the tablet for each sub criterion for every Competitor. By default the CIS allows four photos for each sub criterion, but this number can be changed on the config screen.

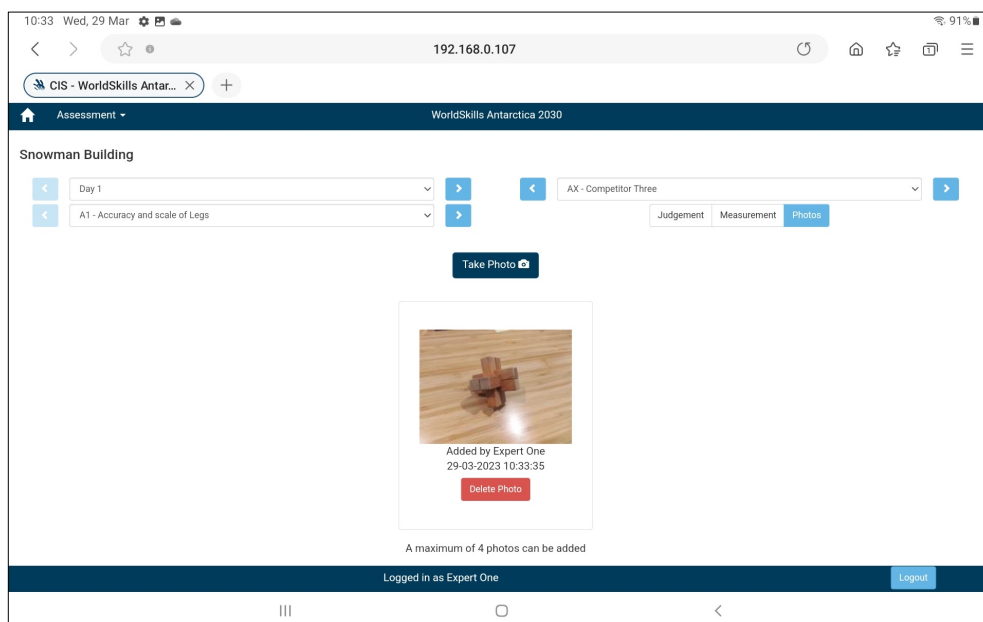
If enabled, a Photos marking type will appear in the assessment type selector.



Tapping the Take Photo button will open the tablet's camera application.



Once the photograph has been taken, it will appear in the CIS user interface.

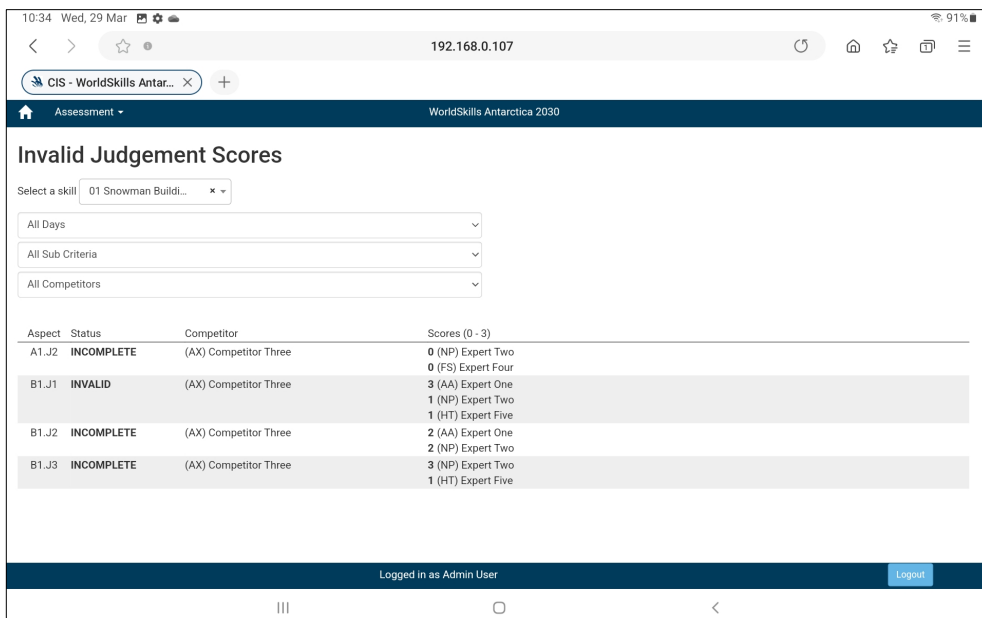


Tapping on the image will display a larger version.

The image will also appear in the Marking Forms with Completed Marks forms (see section [7.1.5](#)) that can be given to the Competitors after the competition.

7.3.4 Invalid Judgement Scores

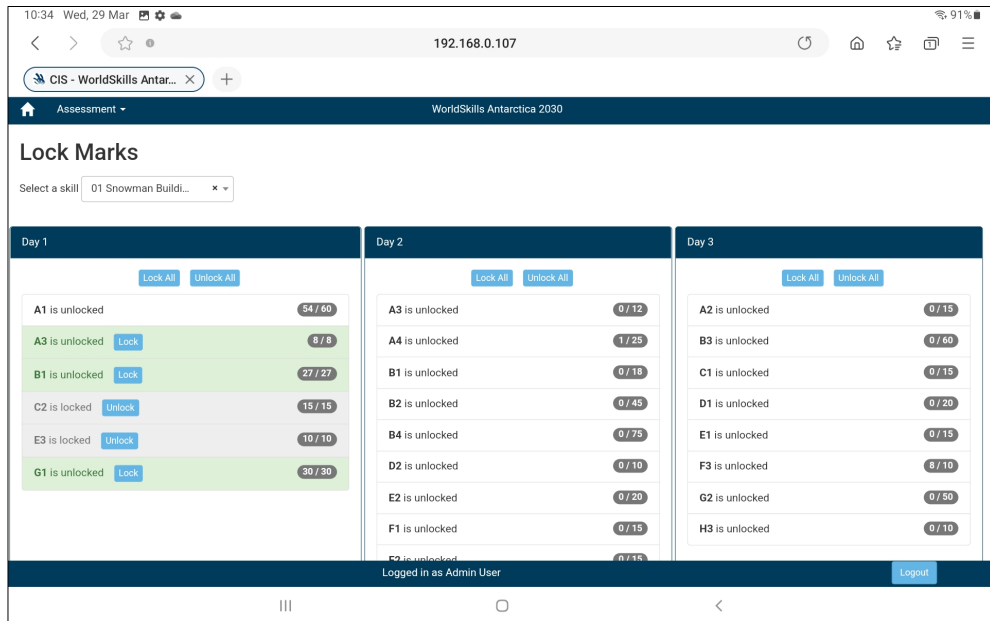
Users with appropriate permissions can also see the current invalid judgement scores for the skill. This has the same functionality as the screen in the PC user interface. See section [7.5](#) for further information.



Aspect	Status	Competitor	Scores (0 - 3)
A1.J2	INCOMPLETE	(AX) Competitor Three	0 (NP) Expert Two 0 (FS) Expert Four
B1.J1	INVALID	(AX) Competitor Three	3 (AA) Expert One 1 (NP) Expert Two 1 (HT) Expert Five
B1.J2	INCOMPLETE	(AX) Competitor Three	2 (AA) Expert One 2 (NP) Expert Two
B1.J3	INCOMPLETE	(AX) Competitor Three	3 (NP) Expert Two 1 (HT) Expert Five

7.3.5 Lock Marks

Users with appropriate permissions can also lock marks for the skill. This has the same functionality as the screen in the PC user interface. See section [7.6](#) for further information.



10:34 Wed, 29 Mar 192.168.0.107

CIS - WorldSkills Antar... x +

Assessment WorldSkills Antarctica 2030

Lock Marks

Select a skill 01 Snowman Buildi... x

Day 1	Day 2	Day 3
Lock All Unlock All A1 is unlocked 54 / 60 A3 is unlocked Lock 8 / 8 B1 is unlocked Lock 27 / 27 C2 is locked Unlock 15 / 15 E3 is locked Unlock 10 / 10 G1 is unlocked Lock 30 / 30	Lock All Unlock All A3 is unlocked 0 / 12 A4 is unlocked 1 / 25 B1 is unlocked 0 / 18 B2 is unlocked 0 / 45 B4 is unlocked 0 / 75 D2 is unlocked 0 / 10 E2 is unlocked 0 / 20 F1 is unlocked 0 / 15	Lock All Unlock All A2 is unlocked 0 / 15 B3 is unlocked 0 / 60 C1 is unlocked 0 / 15 D1 is unlocked 0 / 20 E1 is unlocked 0 / 15 F3 is unlocked 8 / 10 G2 is unlocked 0 / 50 H3 is unlocked 0 / 10

Logged in as Admin User Logout

7.4 PC Marking

To assist assessment of IT related skills, the CIS has a marking screen in the PC user interface. The marking screen can be accessed from the Assess Competitors item of the Assessment menu.



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 Assessment

Expert One

Assess Competitors - 01 Snowman Building

Day 1

A1 - Accuracy and scale of Legs

AX - Competitor Three

Judgement Marking Form			
Aspect	Description	Scores (0 - 3)	Max Mark
A1.J1	Smoothness of Appearance of Right Leg	2	1.00
A1.J2	Smoothness of Appearance of Left Leg		1.00

Measurement Marking Form				
Aspect	Description	Requirements	Measurement	Mark Awarded
A1.M1	Length of Right Leg Ankle to Pelvis and of course this Aspect could be longer than one line of information	800 +/- 5mm	800	1.50 / 1.50
A1.M2	Diameter of Right Leg at Calf	100mm +/- 5mm	811	0.00 / 0.50
A1.M3	Diameter of Right Leg at Thigh	150mm +/- 5mm		0 / 2.00
A1.M4	Length of Left Leg Ankle to Pelvis	800 +/- 5mm	0	0.00 / 1.50

7.4.1 Navigation

Day 1

A1 - Accuracy and scale of Legs

AX - Competitor Three

The first dropdown is for selection of the competition day. This will default to the current competition day, or if being accessed outside of the competition dates will default to day 1. The left and right arrows either side of the dropdown allow navigating backwards and forward through the list.

The current Competitor can be selected from the dropdown box on the right of the screen, or the list of competitors can be navigated by pressing the left and right buttons either side of the dropdown.

The sub criterion selection dropdown on the bottom left contains a list of sub criteria available for the selected Competitor on the selected competition day. This information is drawn from the marking schedule (see section [6.4](#)). Changing the selected Competitor or competition day may result in a different list of sub criteria in the dropdown box. Users will only see the sub criteria where they are a member of the marking team. All other sub criteria will be hidden.

7.4.2 Judgement Marking

Assessors will only have access to enter their own score for each judgement aspect.

Judgement Marking Form			
Aspect	Description	Scores (0 - 3)	Max Mark
A1.J1	 Smoothness of Appearance of Right Leg	2	1.00 
A1.J2	 Smoothness of Appearance of Left Leg		1.00 

The plus icon  will expand to show the judgement benchmarks for each score for the aspect, as well as any extra description lines added in the marking scheme. Pressing the minus icon  will hide the benchmarks and descriptions.

Judgement Marking Form	
Aspect	Description
A1.J1	 Smoothness of Appearance of Right Leg
0 Surface not smooth and many surface defects. Tooling marks visible 1 Surface is smooth but may have some tooling marks 2 Surface is smooth but with some tooling marks 3 Surface is smooth and without any tooling defects or marks	

Clicking the speech bubble icon  will expand a comments field, allowing the marker to give further feedback and explain why a particular score was given. The speech bubble icon will turn blue when a comment is present.

Judgement Marking Form			
Aspect	Description	Scores (0 - 3)	Max Mark
A1.J1	 Smoothness of Appearance of Right Leg	2	1.00 
The leg had some tooling marks			

7.4.3 Measurement Marking

Any member of the marking team can enter measurement marks.

Measurement Marking Form				
Aspect	Description	Requirements	Measurement	Mark Awarded
A4.M1	 Size of head - Top to bottom	250mm +/- 10mm		1.00 / 1.00 
A4.M2	 Width of Head - Cheek to Cheek	160mm +/- 5mm		1.00 / 1.00 
A4.M3	 Depth of Head - Forehead to Back of Head	200mm +/- 5mm		2.00 / 2.00 
A4.M4	 Length of Neck	70mm +/- 5mm		1.50 / 1.50 
A4.M5	 Diameter of Neck	120mm +/- 7mm		0.50 / 0.50 

The plus icon  will expand to show any extra description lines added in the marking scheme. Pressing the minus icon  will hide the extra description text.

Measurement Marking Form	
Aspect	Description
A4.M1	 Size of head - Top to bottom Deduct 0.5 Marks for each mm Error

The middle of the form contains the requirements for the measurement aspect.

The right side of the form contains fields for entering measurement and mark information. The arrow keys can be used to move between the form fields.

Measurement Marking Form	
Measurement	Mark Awarded
	1.00 / 1.00 
	1.00 / 1.00 
	2.00 / 2.00 
	1.50 / 1.50 

The measurement field is a text field for entering any measurement information recorded. The mark awarded field is for recording the mark that the Competitor was awarded by the marking team. While these marks can be entered by typing the digits, there are some shortcuts if the Competitor received full marks or zero marks. Typing “y” or “+” into the mark field will award the Competitor full marks for the aspect. Typing “n” or “-” into the mark field will award the Competitor zero marks. This allows the marks to be entered quickly by simply typing a single character then pressing the down arrow to move to the next one.

Like the Judgement Marking Form, the speech bubble icon  at the end of the row expands a text field for entering comments from the marking team. The speech bubble icon will be blue if there are comments present.

Measurement Marking Form			
Aspect	Description	Requirements	Measurement
A4.M1	 Size of head - Top to bottom	250mm +/- 10mm	/ 1.00 
Enter a comment here			
A4.M2	 Width of Head - Cheek to Cheek	160mm +/- 5mm	/ 1.00 
A4.M3	 Depth of Head - Forehead to Back of Head	200mm +/- 5mm	/ 1.00 

Measurement aspects that have been configured with CIS calculations (see section [6.3](#)) have a slightly different form. For these aspects the mark cannot be entered directly. The mark is determined from the measurement value according to the configuration of the calculation. The measurement value can only be a number.

The mark awarded is shown once the calculation has all the data that it needs to produce a result. For some calculation types the marks cannot be calculated until the measurements for every Competitor have been entered for that aspect.

Measurement	No Attempt	Mark Awarded
	☐	 / 1.50 
101	☐	0.20 / 0.50 
0	☒	0.00 / 2.00 

If a Competitor has not produced any work than can be measured, the “No Attempt” checkbox can be ticked to give the Competitor zero marks for the aspect.

7.5 Invalid Judgement Scores

Judgement assessment requires that all scores given to a Competitor for an aspect differ by no more than one. For example, it is not permitted for one Expert to award a score of 3 and another to award a score of 1. When using tablets or PCs to record assessment, Experts may be assessing independently at different times and cannot consult to ensure that they are within the required difference.

The CIS has a screen that will display where judgement assessment has resulted in an invalid score difference and where marking is incomplete. This screen can be accessed from the Assessment menu.



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[Home](#)
[System](#)
[Competition](#)
[Marking Scheme](#)
[Assessment](#)
[Results](#)
[Reports](#)
Admin User 

Invalid Judgement Scores

Select a skill 01 Snowman Build... 

All Days 

All Sub Criteria 

All Competitors 

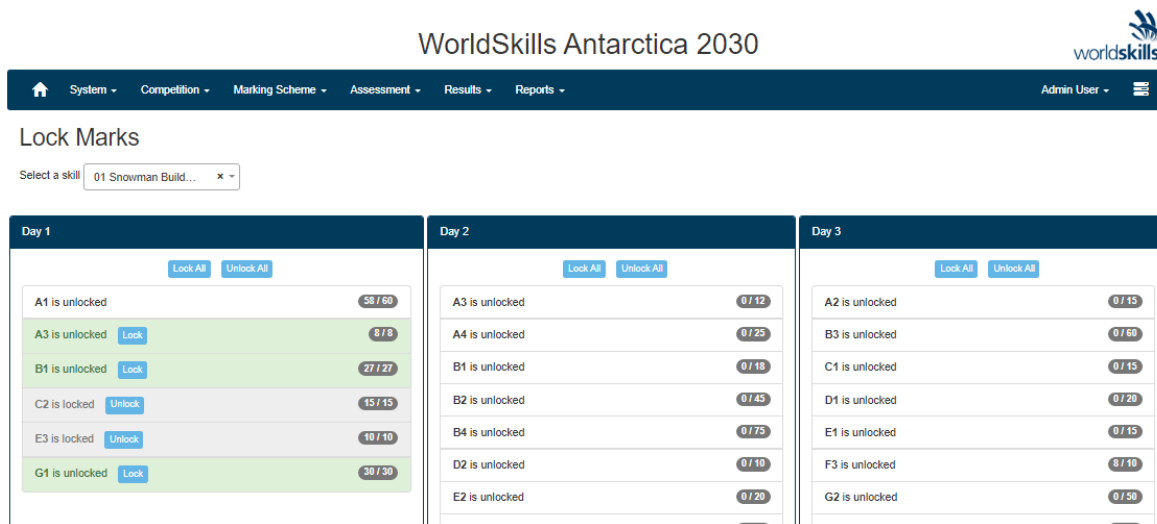
Aspect	Status	Competitor	Scores (0 - 3)
A1.J2	INCOMPLETE	(AX) Competitor Three	0 (NP) Expert Two 0 (FS) Expert Four
B1.J1	INVALID	(AX) Competitor Three	3 (AA) Expert One 1 (NP) Expert Two 1 (HT) Expert Five
B1.J2	INCOMPLETE	(AX) Competitor Three	2 (AA) Expert One 2 (NP) Expert Two
B1.J3	INCOMPLETE	(AX) Competitor Three	3 (NP) Expert Two 1 (HT) Expert Five

The results show the aspect ID, the status of the aspect (Incomplete or Invalid), the Competitor that was being assessed, and the scores for each of the Experts that conducted assessment. The results are sorted according to aspect ID. The list of results can be filtered by competition day, sub criterion, and Competitor.

The Skill Management Team should work with the marking teams for the affected aspects to resolve the difference in assessment. Once the scores have been adjusted to a valid set of scores they will no longer appear on this screen.

7.6 Lock Marks

Once all marks for a sub criterion have been entered they can be locked so that no changes can be made to the marks. The screen to manage this can be found in the Assessment menu.



WorldSkills Antarctica 2030

System - Competition - Marking Scheme - Assessment - Results - Reports - Admin User -

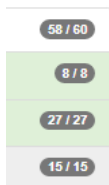
Lock Marks

Select a skill 01 Snowman Build...

Day 1	Day 2	Day 3
A1 is unlocked 58 / 60	A3 is unlocked 0 / 12	A2 is unlocked 0 / 15
A3 is unlocked Lock 8 / 8	A4 is unlocked 0 / 25	B3 is unlocked 0 / 60
B1 is unlocked Lock 27 / 27	B1 is unlocked 0 / 18	C1 is unlocked 0 / 15
C2 is locked Unlock 15 / 15	B2 is unlocked 0 / 45	D1 is unlocked 0 / 20
E3 is locked Unlock 10 / 10	B4 is unlocked 0 / 75	E1 is unlocked 0 / 15
G1 is unlocked Lock 30 / 30	D2 is unlocked 0 / 10	F3 is unlocked 8 / 10
	E2 is unlocked 0 / 20	G2 is unlocked 0 / 50

The sub criteria are listed for each day that they are marked on according to the marking schedule (see section 6.4). If a sub criterion is marked on different days for different Competitors the sub criterion will appear on each day it has been configured for marking. For example, in the screenshot above A3 appears on both Day 1 and Day 2.

On the right of each sub criteria is the number of aspects marked vs the number of aspects required to be marked.

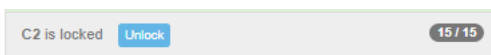


Sub criteria that haven't had all aspects marked for all Competitors on that day will appear white.

Sub criteria that have had all aspects marked and are ready to be locked will be green and have a "Lock" button.



Sub criteria that have had all aspects marked and are locked will be grey and have an "Unlock" button.



Unlocking a sub criterion will prompt the user for a reason why the marks for the sub criterion are being unlocked. This reason and all of the mark changes will appear on the Sign off Form for Changed Marks (see section 7.1.8).

Unlock marks for E3 on day 1

Please enter the reason for unlocking these marks

Each day also has a “Lock All” and “Unlock All” button. If the “Lock All” button is pressed, all sub criteria that have had marking completed and are unlocked will be locked. Sub criteria that are incomplete will not be locked.

7.7 Suspend Marking

The CIS has the ability to put a temporary hold on all marking for a skill. This can be useful in situations where Experts may have access to the CIS outside of competition times and can ensure that no marks are adjusted.

The Suspend Marking screen is located in the Assessment menu.



Suspend Marking

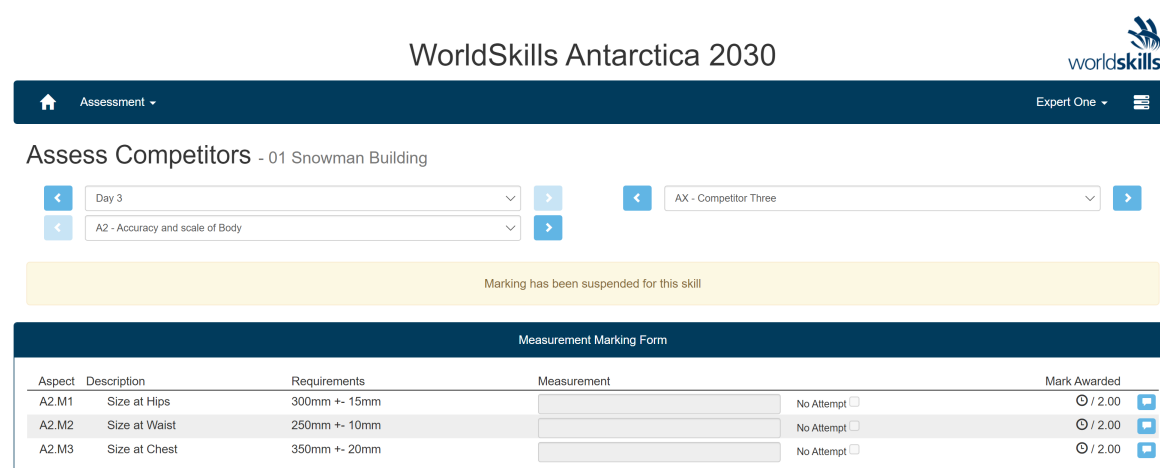
Skill		Day 1	Day 2	Day 3	Active Markers
01 Snowman Building	<button>Suspend Marking</button>	144 / 150	1 / 290	8 / 195	A2 - Expert One
02 Ice Sculpting	<button>Suspend Marking</button>	0 / 0	0 / 0	0 / 0	

The user is presented with a table containing a row for each of the skills that they have access to. The second column contains the button for suspending or resuming marking. The next columns show the number of marks entered each day. The final column shows any Experts that are currently logged in to CIS and viewing a marking screen and which sub criterion they are viewing.

Skill		Day 1	Day 2	Day 3	Active Markers
01 Snowman Building	<button>Resume Marking</button>	144 / 150	1 / 290	8 / 195	A2 - Expert One
02 Ice Sculpting	<button>Suspend Marking</button>	0 / 0	0 / 0	0 / 0	

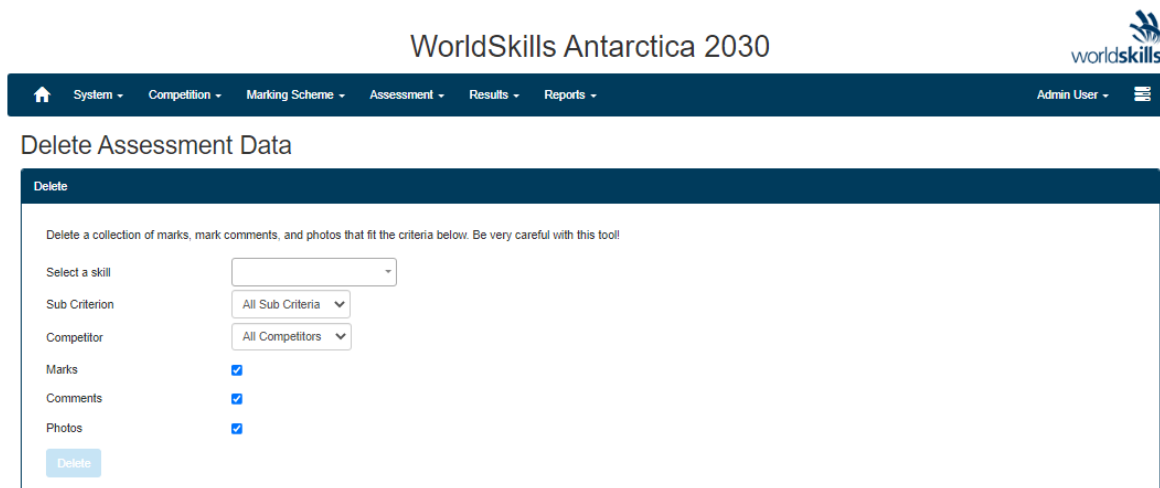
When a skill has had marking suspended, its row will have a grey background. Marking can be allowed once again by clicking the “Resume Marking” button.

When an Expert is logged in to CIS while marking is suspended they will see a notice “Marking has been suspended for this skill” and the form fields will be disabled.



7.8 Delete Assessment Data

Occasionally it may be necessary to remove a large amount of assessment data from the CIS. This can be done from the Delete Assessment Data screen which can be accessed from the Assessment menu.

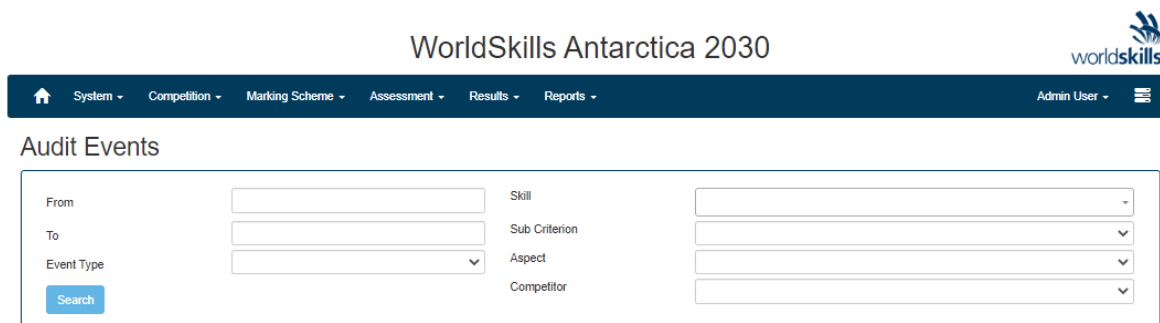


A skill is required to be selected. The target can then be narrowed down to a particular sub criterion and/or a particular Competitor. The delete function can be applied to marks, comments, and photographs.

It is recommended that permission for this function is only given to Admin users.

7.9 Audit Events

The CIS tracks many different events and keeps a record of these in its logs. These can be viewed on the Audit Events screen, available from the Competition menu.



The "From" and "To" fields are used to restrict results to only those from a specific date range. The "Event Type" will filter for events of a particular type, such as mark entry, mark deletion, mark locking, etc. Events can also be filtered by skill, sub criterion, aspect, and Competitor.

Audit Events

From		Skill	01 Snowman Building ✕
To		Sub Criterion	A1 - Accuracy and scale of Legs ▼
Event Type	▼	Aspect	A1.J2 - Smoothness of Appearance of Left Leg ▼
Search		Competitor	▼

Timestamp	Action	Type	Competitor	User
24-03-2023 11:20:41	Create	Judgement Score Data Entry	A1.J2 (AA) Competitor One	Admin User
Entered By		Admin User		
Mark Entry Source		Data Entry		
Judge		(AX) Expert Three		
Score		3		
24-03-2023 11:20:42	Create	Judgement Score Data Entry	A1.J2 (AA) Competitor One	Admin User
24-03-2023 11:20:44	Create	Judgement Score Data Entry	A1.J2 (AA) Competitor One	Admin User
24-03-2023 11:21:59	Create	Judgement Score Data Entry	A1.J2 (AX) Competitor Three	Admin User
24-03-2023 11:22:00	Create	Judgement Score Data Entry	A1.J2 (AX) Competitor Three	Admin User
24-03-2023 11:22:00	Create	Judgement Score Data Entry	A1.J2 (AX) Competitor Three	Admin User
24-03-2023 11:22:40	Delete	Judgement Score Data Entry	A1.J2 (AX) Competitor Three	Admin User
Entered By		Admin User		
Mark Entry Source		Data Entry		
Judge		(NP) Expert Two		
24-03-2023 11:22:42	Delete	Judgement Score Data Entry	A1.J2 (AX) Competitor Three	Admin User
24-03-2023 11:22:43	Update	Judgement Score Data Entry	A1.J2 (AX) Competitor Three	Admin User
24-03-2023 11:22:44	Create	Judgement Score Data Entry	A1.J2 (AX) Competitor Three	Admin User
24-03-2023 11:22:44	Create	Judgement Score Data Entry	A1.J2 (AX) Competitor Three	Admin User

The results of the search show the timestamp of the event, what action took place, the type of action, aspect information, the relevant Competitor if there is one, and the user who performed the action. Each row can be expanded to show any other data that is recorded for the event.

7.10 Active Users

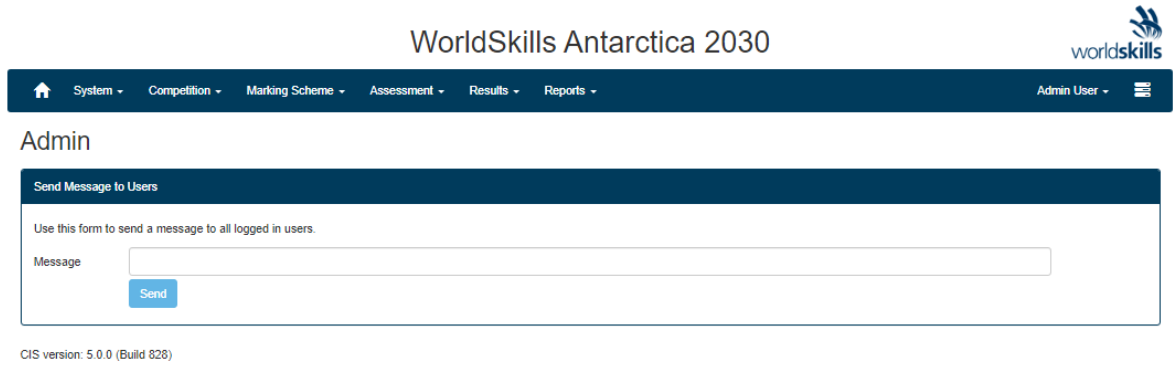
The Active Users screen shows the users currently logged in to CIS. This screen can be accessed from the System menu.

WorldSkills Antarctica 2030				
System Competition Marking Scheme Assessment Results Reports Admin User				
Active Users				
User Count: 2				
Name	Position	Started	Last Active	User Agent
Admin User		13-05-2023 00:02:47	13-05-2023 00:24:44	Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/111.0.0.0 Safari/537.36
(AA) Expert One	Expert - 01 Snowman Building	13-05-2023 00:24:35	13-05-2023 00:24:40	Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/111.0.0.0 Safari/537.36
Refresh				

Users can be forcibly logged out of CIS by clicking the “Logout” button at the end of the row.

7.11 Admin

The Admin screen can be used to send a message to all users currently logged in to CIS. This screen can be accessed from the System menu.



WorldSkills Antarctica 2030

Admin User

Admin

Send Message to Users

Use this form to send a message to all logged in users.

Message

CIS version: 5.0.0 (Build 828)

The version and build number of the CIS software is also located at the bottom left of the screen.

8 Finalising a Competition

8.1 View Marks

To see the current total marks on the 100 scale for each Competitor for a skill, use the View Marks screen available in the Assessment menu.

WorldSkills Antarctica 2030 

System Competition Marking Scheme Assessment Results Reports Admin User

View Marks

Select a skill: 01 Snowman Build... x

Select a view: Total Marks Only v

Position	Member	Name	Total
1	Hoth	Competitor Five	18.88
2	Fortress of Solitude	Competitor Four	17.52
3	North Pole	Competitor Two	14.58
4	Antarctica	Competitor One	13.33
5	Atlantis	Competitor Three	12.12

[Create PDF](#)

The results can be viewed with totals only, daily totals, or totals by criterion.

A PDF of the totals can be generated from this screen.

8.2 Skill Results

Once all marks for a skill have been entered into the CIS and have been locked (see section 7.6), the results for that skill on the WorldSkills Scale can be viewed. These are available on the Skill Results screen that can be accessed from the Results menu.

Note that any results that calculate to a value of less than 150 are adjusted so that the final result is 150. This is to account for any unusual marking distributions that can arise in skill competitions with low numbers of Competitors. See the document WSI_SC_WorldSkills_Scale for further information on the WorldSkills Scale.

WorldSkills Antarctica 2030

System Competition Marking Scheme Assessment Results Reports

Results

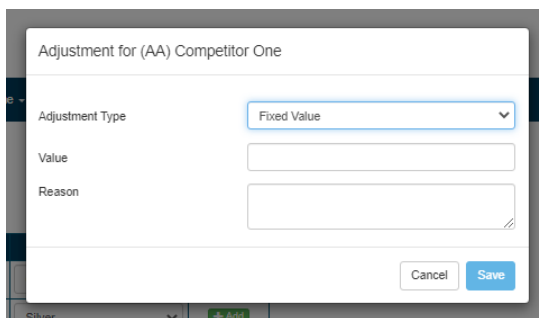
Select a skill: 01 Snowman Build... x

Position	Member	Name	Result	Medal	Adjustments
1	Hoth	Competitor Five	723	Gold	+ Add
2	North Pole	Competitor Two	720	Silver	+ Add
3	Antarctica	Competitor One	700	Bronze	+ Add
3	Fortress of Solitude	Competitor Four	700	Bronze	+ Add
5	Atlantis	Competitor Three	673		+ Add

[Regenerate Results](#)
[Lock Results](#)
[Create PDF](#)

CIS will automatically assign medals to Competitors according to the rules set on the config. These medals can be adjusted manually by selecting a different medal from the dropdown box.

This screen also allows to adjust a Competitor's result, for example to apply a penalty. To adjust a result, click the "+Add" button. The following dialogue window will appear.



There are two adjustment types:

Fixed Value – Set the WorldSkills Scale result to a specific value.

600 or Lowest Score – Set the WorldSkills Scale result to a value of 600, or if there is a result lower than that for any other skill then set to five points less than the lowest result.

A reason for the adjustment should be entered.

There are three buttons at the bottom of the screen beneath the skill results.



The “Regenerate Results” button will recalculate the results and re-assign the medals.

When all results have been confirmed, the “Lock Results” button should be clicked to prevent any further adjustments and remove the “Provisional Results” watermark from the results PDF document.

The “Create PDF” button will create a PDF document that contains the WorldSkills Scale results for the selected skill. If the results have not been locked, a “Provisional Results” watermark will be placed on the document.

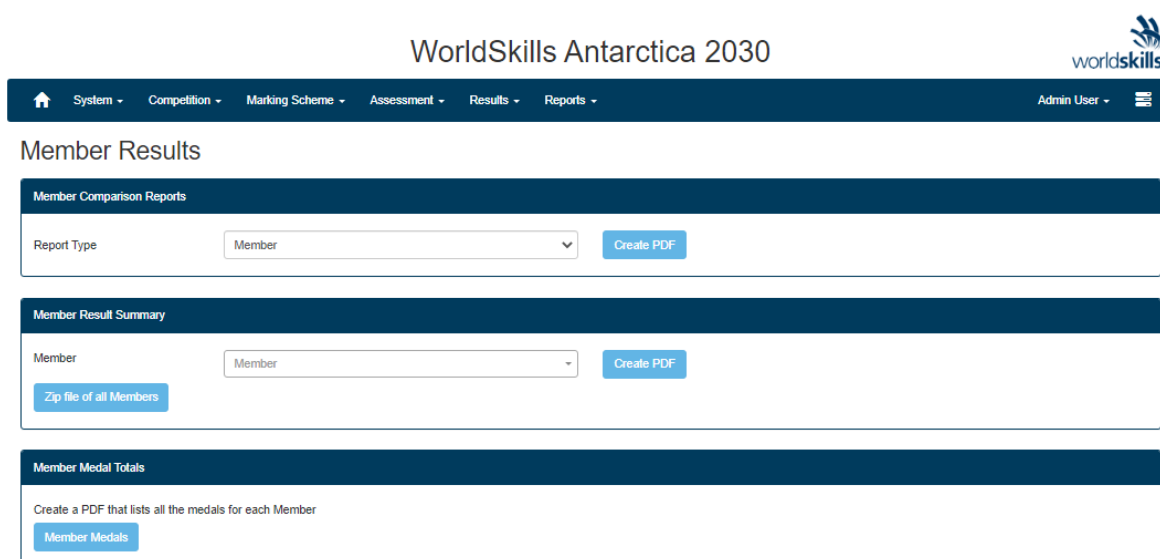
01 Snowman Building WorldSkills Scale Results WorldSkills Antarctica 2030			
Name	Member	Result	Award
Competitor Five	Hoth	723	Gold
Competitor Two	North Pole	720	Silver
Competitor One	Antarctica	700	Bronze
Competitor Four	Fortress of Solitude	700	Bronze
Competitor Three	Atlantis	673	

Provisional Results

Page 1 of 1
CIS software provided courtesy of WorldSkills International www.worldskills.org
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8.3 Member Results

The Member Results screen provides summary data of results for each Member as well as several reports for comparing the performance of each Member.



WorldSkills Antarctica 2030

System Competition Marking Scheme Assessment Results Reports Admin User

Member Results

Member Comparison Reports

Report Type Member Create PDF

Member Result Summary

Member Member Create PDF

Zip file of all Members

Member Medal Totals

Create a PDF that lists all the medals for each Member

Member Medals

The Member Comparison reports section allows the creation of various reports that can be used for comparing the performance of the Members. There are seven different reports:

Member – Lists the Members in alphabetical order of their ISO code and provides their total medal points, average result score per Competitor, the number of Competitors, and the number of each type of medal won.

Total Medal Points – Ranks the Members in order from highest total medal points to lowest. The number of Competitors and number of each type of medal won is also provided.

Total Point Score – Ranks the Members in order from the highest total point score to the lowest. This report will list the Members with the largest number of Competitors at the top and thus is not a good measurement of performance. The number of Competitors and number of each type of medal won is also provided.

Average Medal Points – Ranks the Members in order from highest average medal points per Competitor to the lowest. The number of Competitors and number of each type of medal won is also provided.

Average Point Score – Ranks the Members in order from highest average point score per Competitor to the lowest. The number of Competitors and number of each type of medal won is also provided.

Team Size – Lists the Members in order from those with the highest number of Competitors to the lowest. The number of each type of medal won is also provided.

High Performers – Ranks the Members in order from those with the highest percentage of high performing Competitors to the lowest. A high performing Competitor is one who ranks in the top 25% of results in their skill. The number of each type of medal won is also provided.

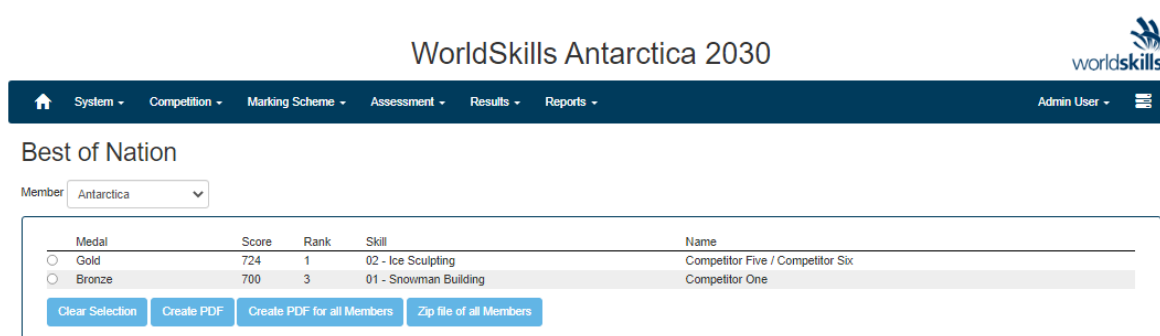
Gold Medal – Ranks the Members according to the number of gold medals awarded to each Member. Where Members have the same number of gold medals, the Members are ranked according to the number of silver medals. Where Members have the same number of gold and silver medals, Members are ranked according to the number of bronze medals. Where Members have the same number of gold, silver and bronze medals, Members are ranked according to the number of Medallions for Excellence.

The Member Result Summary document lists the results for a Member in each of the skills in which they competed. A zip file can be generated that contains the Result Summary documents for all Members.

The “Member Medal Totals” button creates a document that lists all the medals awarded to each Member.

8.4 Best of Nation

This screen is for the recording of the winners of the Best of Nation award. Each Member can select one Competitor or Team to receive the award. Often this is the Competitor with the highest result points or a Competitor who won a gold medal, but there is no criteria imposed by WorldSkills International. For example, some Members select a Competitor who encouraged and supported their team mates.

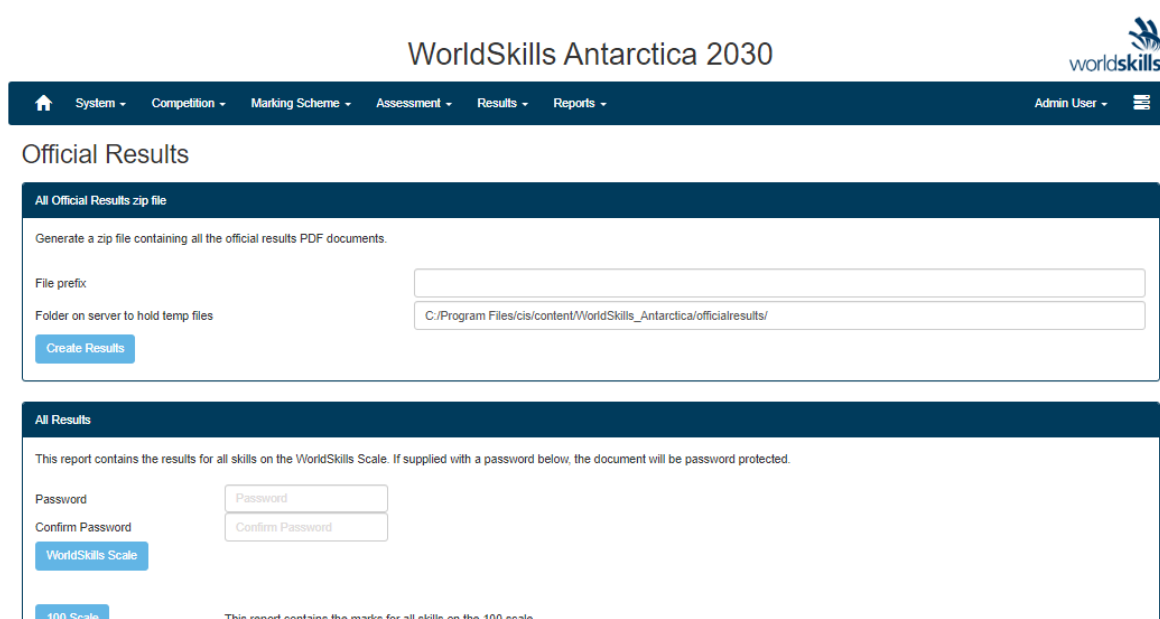


Medal	Score	Rank	Skill	Name
☐ Gold	724	1	02 - Ice Sculpting	Competitor Five / Competitor Six
☐ Bronze	700	3	01 - Snowman Building	Competitor One

The CIS can create a PDF document that can be distributed to Members to record their selection. It can be created the currently selected Member, or a PDF can be generated that contains the results for all Members.

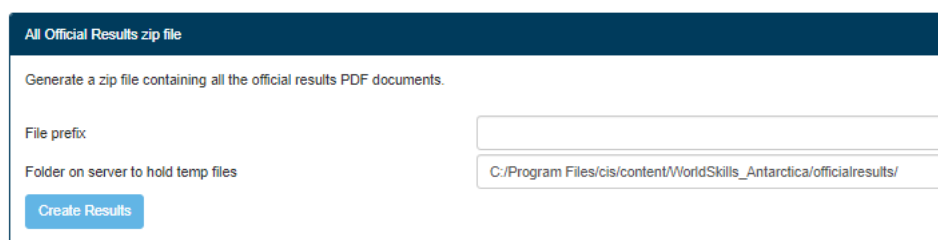
8.5 Official Results

The Official Results screen allows the generation of a range of documents associated with the final results of the competition. There are several sections on the page.



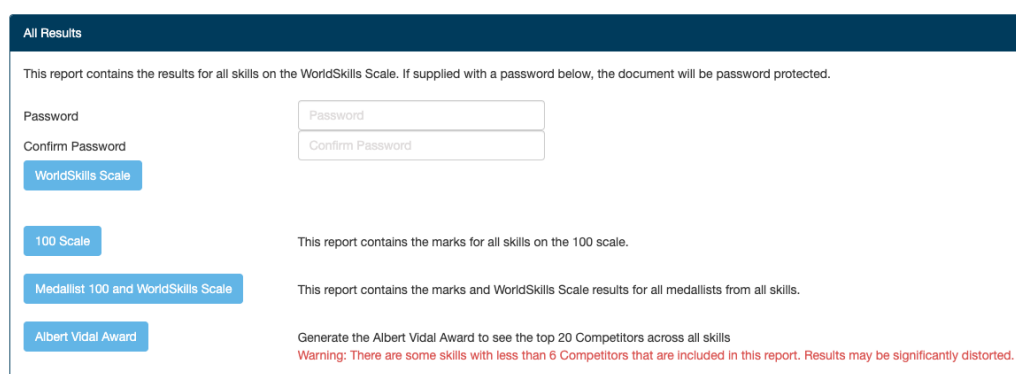
8.5.1 All Official Results zip file

This form creates a zip file containing the complete set of Official Results documents. This includes a document containing the WorldSkills Scale results for all skills, the medallist WorldSkills Scale results and 100 scale marks, all of the Member Comparison reports, the marking schemes of every skill, and the completed marking forms sorted according to Member and according to skill.



A file prefix can be added to each of the files generated, such as “WSC2030_”. The folder where the generated files are stored temporarily can also be adjusted.

8.5.2 All Results



The “WorldSkills Scale” button in this section generates a PDF document containing the WorldSkills Scale results for every skill. A password can optionally be set for this document so that it can only be opened by providing the correct password.

The “100 Scale” button produces a document containing the 100 scale marks for every skill. It also breaks down the results per criterion.

The “Medallist 100 and WorldSkills Scale” button creates a document that focusses on the medal winners from each skill. It lists their medal, WorldSkills Scale result, 100 scale mark, and the breakdown of marks per criterion. It also lists several statistics for each skill, such as the highest and lowest mark, the average, the median, and the standard deviation.

8.5.3 Associate Member Results

Associate Members are not permitted to have their Competitors receive medals or be given scores on the WorldSkills Scale. This form will generate a collection of results that show where their Competitors would have ranked if they had been included in the results. The documents are watermarked with “Hypothetical Results” to ensure that they cannot be confused with Official Results.

Associate Member Results

These documents contain a set of hypothetical results that would have been produced if Associate Members were Full Members. These are NOT official results.

File prefix	WSC2022SE
Folder on server to hold temp files	/opt/cis/content/WorldSkills_2022_Special_Edition/officialresults/

Create Results

8.5.4 Other Reports

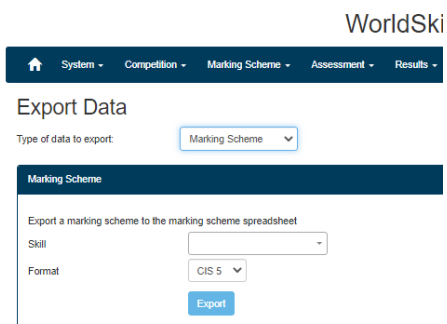
This section contains a single report. Clicking the “Result Changes” button creates a spreadsheet that lists all changes that had a direct affect on results, such as excluding a Competitor from the WorldSkills Scale results or where penalties have been applied to a Competitor.

8.6 Exporting Data

There are several types of data that can be exported from CIS from this screen. It can be accessed from the Export Data menu item in the Competition menu.

8.6.1 Marking Scheme

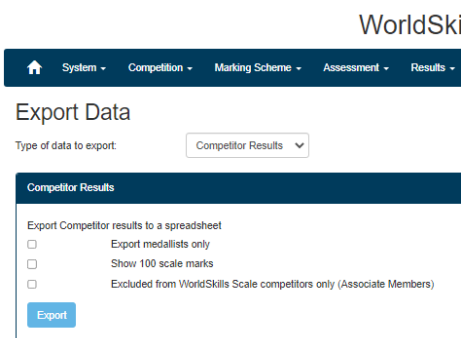
This form exports a marking scheme to a spreadsheet. This is the same functionality as that available on the Marking Scheme screen (see section [6.2](#)).



The screenshot shows the 'WorldSki' logo at the top right. Below it is a navigation bar with links: Home, System, Competition, Marking Scheme, Assessment, and Results. The main heading is 'Export Data'. Underneath, there is a dropdown menu labeled 'Type of data to export:' with 'Marking Scheme' selected. Below this is a section titled 'Marking Scheme' with the instruction 'Export a marking scheme to the marking scheme spreadsheet'. It contains two dropdown menus: 'Skill' and 'Format' (with 'CIS 5' selected). An 'Export' button is at the bottom right of this section.

8.6.2 Competitor Results

This form exports the Competitors' results to a spreadsheet. There are several options on this form.



The screenshot shows the 'WorldSki' logo at the top right. Below it is a navigation bar with links: Home, System, Competition, Marking Scheme, Assessment, and Results. The main heading is 'Export Data'. Underneath, there is a dropdown menu labeled 'Type of data to export:' with 'Competitor Results' selected. Below this is a section titled 'Competitor Results' with the instruction 'Export Competitor results to a spreadsheet'. It contains three checkboxes: 'Export medallists only', 'Show 100 scale marks', and 'Excluded from WorldSkills Scale competitors only (Associate Members)'. An 'Export' button is at the bottom left of this section.

Export medallists only – By default the CIS exports results for all Competitors who receive WorldSkills Scale results. If this checkbox is ticked only the results for medallists will be exported.

Show 100 scale marks – By default the CIS only exports the WorldSkills Scale results. If this checkbox is ticked the 100 scale marks will also be included in the export.

Excluded from WorldSkills Scale competitors only – This option accommodates exporting the 100 scale marks for Competitors who have been excluded from receiving WorldSkills Scale results, such as those from Associate Members.

8.6.3 Best of Nation

This form exports all the Best of Nation selections from all Members to a spreadsheet.

8.6.4 Photos

This form exports all the assessment photos taken for a selected skill to a zip file.

8.6.5 People

This form exports all people who have been registered in CIS to a spreadsheet.

9 Reports

The CIS has a number of reports that can provide insights and assistance at various stages of the competition. These are available from the Reports menu.

9.1 Skill Status

The Skill Status report provides a snapshot of the progress of a particular skill.



There are a number of sections that provide some high level information about the skill.

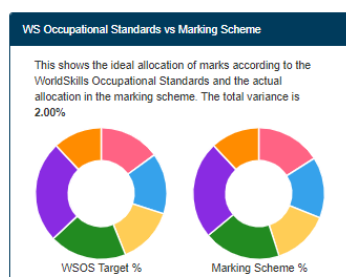
There is some data related to the marking scheme.

Marking Scheme	
Number of Criteria	9
Number of Sub Criteria	26
Number of Aspects	79
Total Marks Defined	100 / 100
Marking Days Defined	26 / 26
Marking Teams Defined	7 / 26
Number of Competitors	5
Total Aspects to Mark	395
Marking Scheme Locked	✓

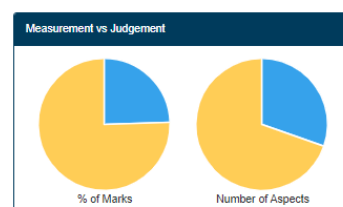
There is a visual representation of the amount of marking to be done each day.



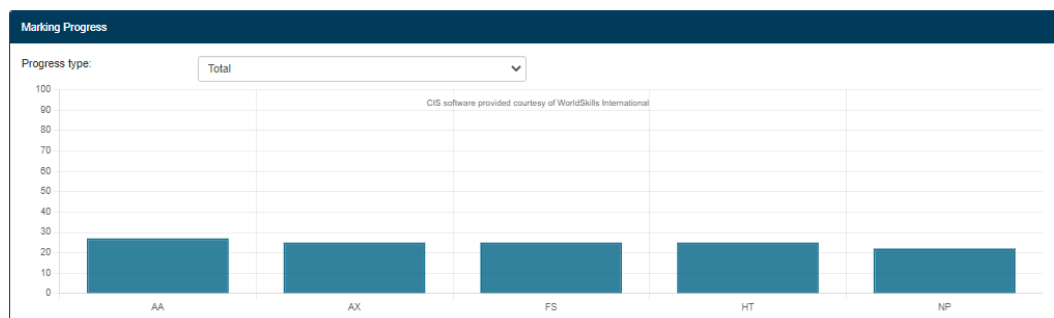
There is a visual comparison of the WSOS values and the implementation of them in the marking scheme. Hovering over a coloured section will reveal the numeric value.



There is a visual comparison of measurement and judgement marking in the marking scheme. It compares by percentage of marks and by number of aspects. Hovering over a coloured section will reveal the numeric value.



There is a chart showing the marking progress for each Competitor. It can show the overall progress or the progress for a given competition day.



9.2 Skill Preparedness

The Skill Preparedness report provides an overview of whether skills are ready for marking.

WorldSkills Antarctica 2030

worldskills

System - Competition - Marking Scheme - Assessment - Results - Reports - Admin User -

Skill Preparedness

Skill	# Criteria	# Sub Criteria	# Aspects	Aspect Marks	M v J Marks	M v J # Aspects	WSOS Variance	% M with Calcs	Locked	Marking Days	Marking Teams
01 Snowman Building	9	26	79	100.00			2.00	16.36	✓	26 / 26	7 / 26
02 Ice Sculpting	0	0	0	0.00			No WSOS	0.00	✗	0 / 0	0 / 0

Create PDF

Cells that are coloured orange indicate that the values are outside of the recommended range. Cells that are coloured red indicate that the values are outside the recommended range by a significant amount and there may be an issue that requires further investigation.

9.3 WSOS Mark Allocation Table

This report shows how the WSOS values are distributed amongst the marking scheme criteria and the amount of variance in the marking scheme.

WorldSkills Antarctica 2030

worldskills

System - Competition - Marking Scheme - Assessment - Results - Reports - Admin User -

WSOS Mark Allocation Table

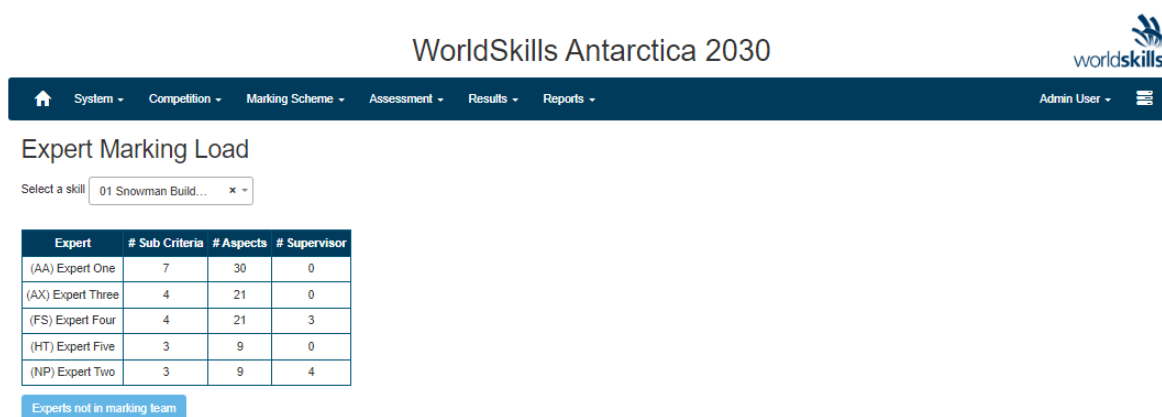
Select a skill: 01 Snowman Build... x

WSOS Section	Criteria									Total Marks Per Section	WSOS Marks Per Section	Variance
	A	B	C	D	E	F	G	H	I			
1				4.00	5.50		3.50	3.00		16.00	15.00	1.00
2				4.00	4.00		2.00	5.00		15.00	15.00	0.00
3						12.00	2.00			14.00	14.00	0.00
4	18.00						1.00			19.00	19.00	0.00
5	6.00	14.00		4.00						24.00	25.00	1.00
6	2.00		8.00					2.00		12.00	12.00	0.00
Total	26.00	14.00	8.00	12.00	9.50	12.00	8.50	8.00	2.00	100.00	100.00	2.00

Create PDF

9.4 Expert Marking Load

This report shows how much marking is done by each Expert in the skill.



WorldSkills Antarctica 2030

System Competition Marking Scheme Assessment Results Reports Admin User

Expert Marking Load

Select a skill 01 Snowman Build...

Expert	# Sub Criteria	# Aspects	# Supervisor
(AA) Expert One	7	30	0
(AX) Expert Three	4	21	0
(FS) Expert Four	4	21	3
(HT) Expert Five	3	9	0
(NP) Expert Two	3	9	4

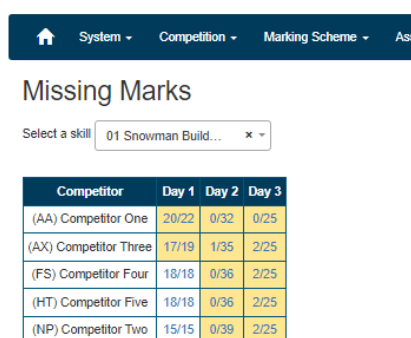
Experts not in marking team

It shows the number of sub criteria that the Expert is on a marking team for, the total number of aspects that they are scheduled to mark, and the number of marking teams where they are a supervisor.

The button at the bottom of the table generates a document that lists all of the Experts who are not in any marking teams.

9.5 Missing Marks

This report shows the number of aspects marked and the number expected to be marked each day for each Competitor.



WorldSkills Antarctica 2030

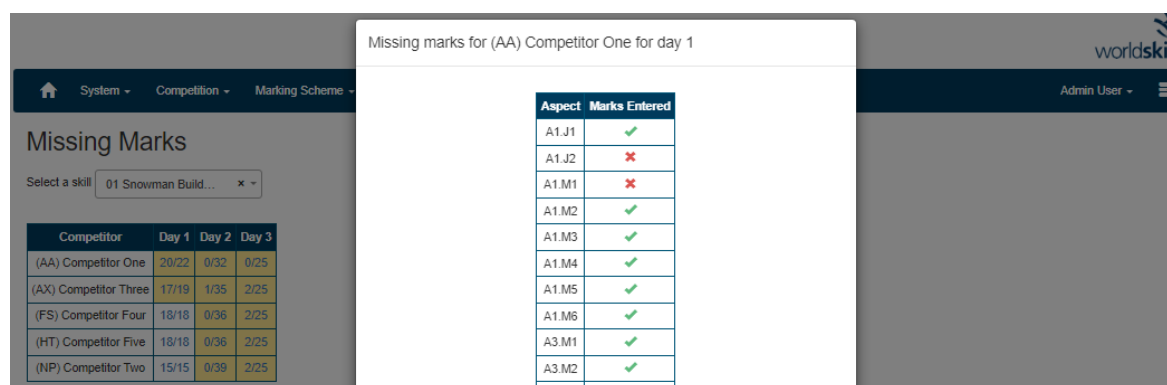
System Competition Marking Scheme Assessment

Missing Marks

Select a skill 01 Snowman Build...

Competitor	Day 1	Day 2	Day 3
(AA) Competitor One	20/22	0/32	0/25
(AX) Competitor Three	17/19	1/35	2/25
(FS) Competitor Four	18/18	0/36	2/25
(HT) Competitor Five	18/18	0/36	2/25
(NP) Competitor Two	15/15	0/39	2/25

Clicking on the marks for one day will pop up a window showing the individual aspects marked.



WorldSkills Antarctica 2030

System Competition Marking Scheme Assessment

Missing Marks

Select a skill 01 Snowman Build...

Competitor	Day 1	Day 2	Day 3
(AA) Competitor One	20/22	0/32	0/25
(AX) Competitor Three	17/19	1/35	2/25
(FS) Competitor Four	18/18	0/36	2/25
(HT) Competitor Five	18/18	0/36	2/25
(NP) Competitor Two	15/15	0/39	2/25

Missing marks for (AA) Competitor One for day 1

Aspect	Marks Entered
A1.J1	✓
A1.J2	✗
A1.M1	✗
A1.M2	✓
A1.M3	✓
A1.M4	✓
A1.M5	✓
A1.M6	✓
A3.M1	✓
A3.M2	✓

9.6 Changed Marks

This report uses the same log data as the Audit Event facility (see section 7.9) to look at the marking history where marks have changed.



WorldSkills Antarctica 2030

System Competition Marking Scheme Assessment Results Reports Admin User

Changed Marks

Select a skill 01 Snowman Build...

Sub Criterion A1 - Accuracy and scale of Legs Search

Timestamp	Action	Type	Competitor	User
24-03-2023 11:22:40	Delete	Judgement Score Data Entry	A1.J2 (AX) Competitor Three	Admin User
24-03-2023 11:22:42	Delete	Judgement Score Data Entry	A1.J2 (AX) Competitor Three	Admin User
24-03-2023 11:22:43	Update	Judgement Score Data Entry	A1.J2 (AX) Competitor Three	Admin User
History of A1.J2 for (AX) Competitor Three				
24-03-2023 11:21:59	Create	Value: 3	Entered By: Admin User	
24-03-2023 11:22:00	Create	Value: 2	Entered By: Admin User	
24-03-2023 11:22:00	Create	Value: 3	Entered By: Admin User	
24-03-2023 11:22:40	Delete		Entered By: Admin User	
24-03-2023 11:22:42	Delete		Entered By: Admin User	
24-03-2023 11:22:43	Update	Value: 0	Entered By: Admin User	
24-03-2023 11:22:44	Create	Value: 0	Entered By: Admin User	
24-03-2023 11:22:44	Create	Value: 0	Entered By: Admin User	
29-03-2023 10:26:20	Delete		Entered By: (AA) Expert One	
24-03-2023 13:03:20	Update	Measurement Mark	A1.M2 (AA) Competitor One	Admin User
24-03-2023 13:03:26	Update	Measurement Mark	A1.M2 (AA) Competitor One	Admin User
27-03-2023 12:10:13	Update	Judgement Score Data Entry	A1.J2 (AX) Competitor One	Admin User

The list of changed marks is filtered by sub criterion. Each deletion or modification of a mark for that aspect is listed in the results and includes the timestamp, action type, the Competitor, and the user who made the change.

Each row can be expanded to show the full change history for that aspect and Competitor.

9.7 Mark Entry Overview

This report provides a summary of the progress of marking for each skill. For each day it reports the number of aspects marked and the number of sub criteria locked. The last column provides a visual indication of the overall marking progress for the skill.

WorldSkills A

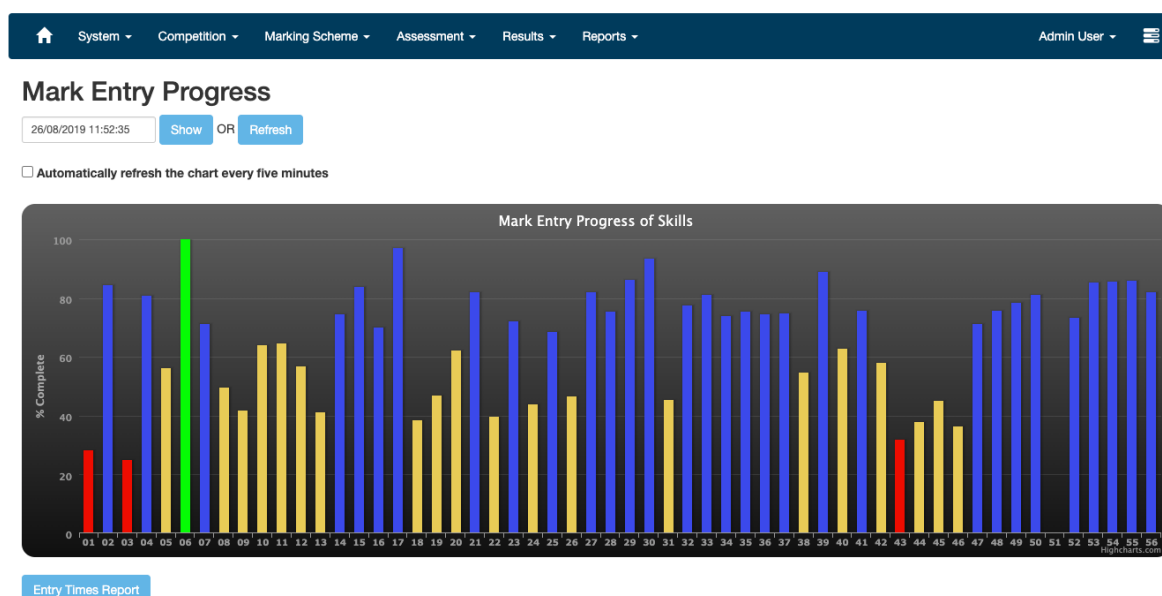
System Competition Marking Scheme Assessment Results Reports

Mark Entry Overview

Skill		Day 1	Day 2	Day 3	Total Marking
01 Snowman Building	Aspects Marked	144 / 150	1 / 290	8 / 195	
	Sub Criteria Locked	2 / 6	0 / 14	0 / 8	
02 Ice Sculpting	Aspects Marked	0 / 0	0 / 0	0 / 0	
	Sub Criteria Locked	0 / 0	0 / 0	0 / 0	

9.8 Mark Entry Progress

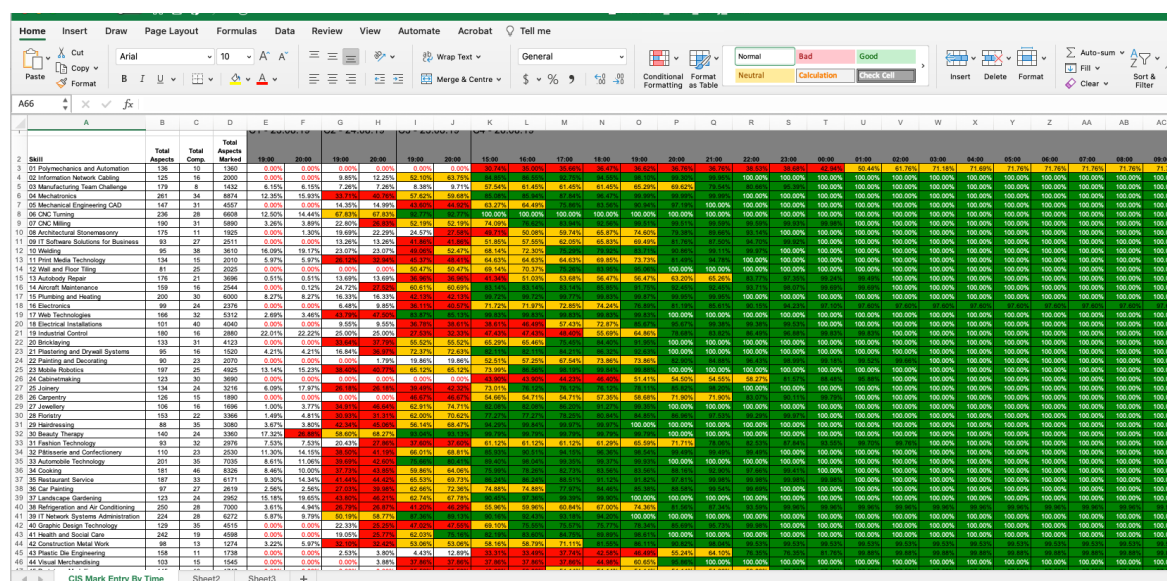
This report provides a visual indication of the marking progress of all skills.



The columns are coloured to indicate different stages of marking completion. Red indicates less than 33% of marks entered, yellow indicates greater than 33% but less than 66%, blue indicates greater than 66% but less than 100%, and green indicates that 100% of marks have been entered. Hovering the cursor over a column will display a small box that contains the name of the skill and the percentage of mark entry complete.

The report defaults to showing the mark entry progress at the current date and time. Adjusting the timestamp field at the top of the screen to any point in the past and clicking the “Show” button will update the chart to show the marking progress at that time. The “Refresh” button will show the progress at the current date and time. The checkbox “Automatically refresh the chart every five minutes” can be ticked to periodically refresh the chart.

The “Entry Times Report” button will create a spreadsheet showing the mark entry progress of all skills at key points in time.



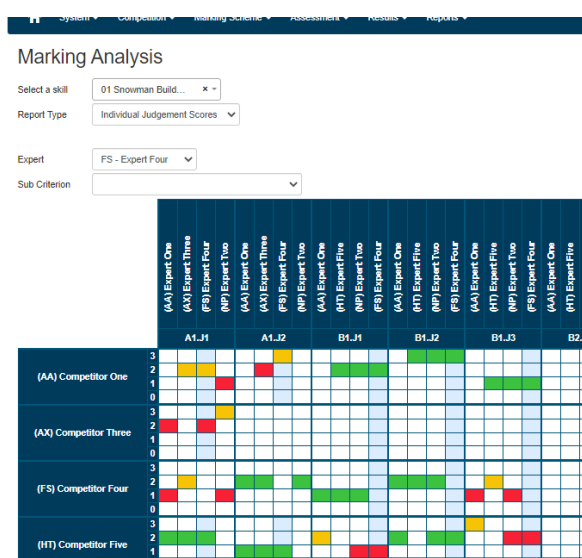
The screenshot shows a spreadsheet titled 'CIS Mark Entry By Time'. The columns represent skills (A to AC) and rows represent time points (1 to 56). The cells contain the percentage of marks entered for each skill at each time point. The cells are color-coded: red for less than 33%, yellow for 33% to 66%, blue for 66% to 100%, and green for 100%. The spreadsheet is generated from the 'Entry Times Report' button.

9.9 Marking Analysis

The CIS provide a number of reports on the Marking Analysis screen to look at the assessment behaviour of the Experts for a skill.

9.9.1 Individual Judgement Scores

This report looks at each of the judgement scores awarded by all members of the marking team that an individual Expert was part of.



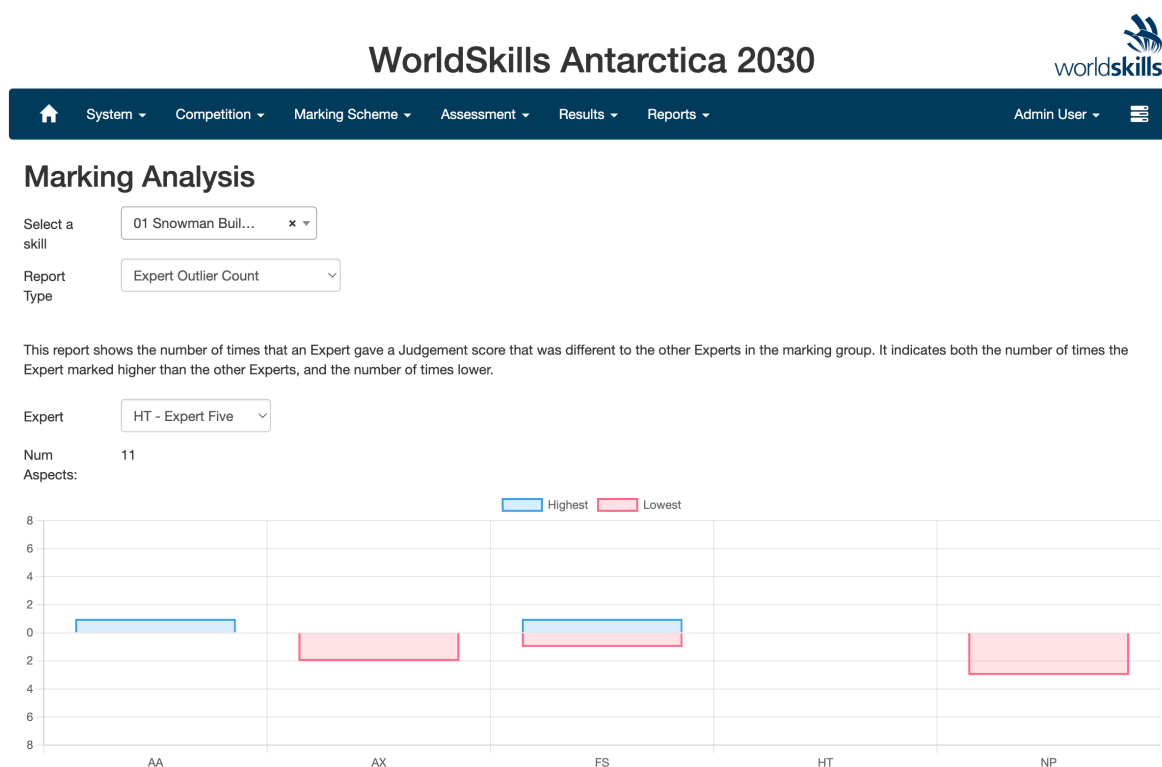
In the example above, all aspects where Expert Four was in the marking team are displayed, showing the scores awarded by each Expert to each of the Competitors. The column for Expert Four has been highlighted in light blue.

Where each of the cells are green for a Competitor it indicates that all three of the Experts agreed on the score. Where the Experts did not agree, the Experts that awarded the higher score are shaded yellow and the Experts that gave the lower score are shaded red.

The results can be further filter to show only results for a particular sub criterion.

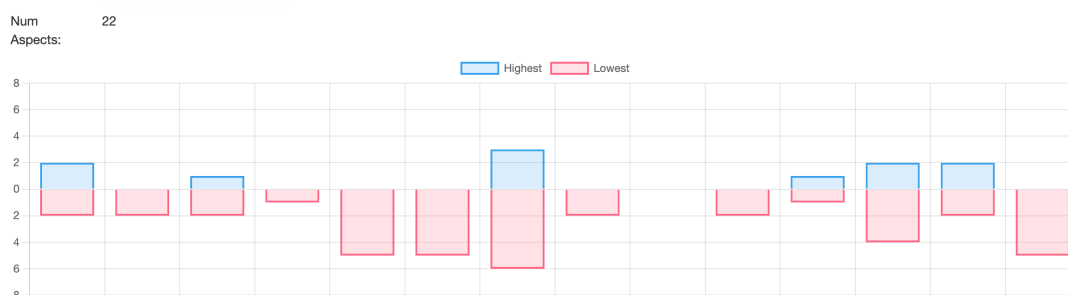
9.9.2 Expert Outlier Count

This report shows how often an Expert deviated from the other two Experts in the marking team when assessing judgement aspects.

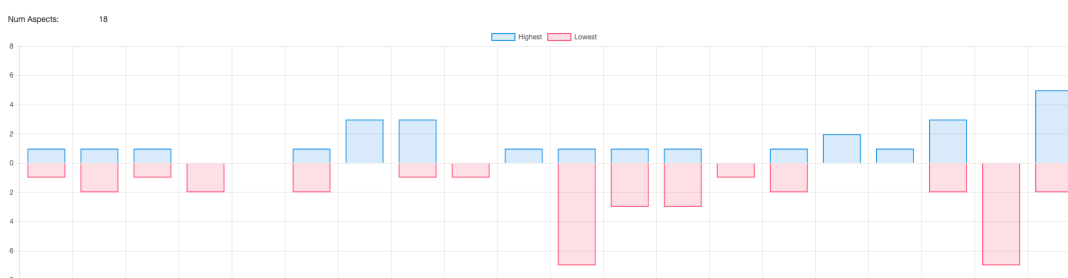


In the screenshot above we can see that Expert Five gave a lower score to the Competitor from NP three times, the Competitor from AX twice, and the Competitor from FS once. They also gave the highest score once to the Competitors from AA and FS.

With larger sample sizes you can start to see patterns in Expert marking. For example, the following Expert appears to be marking more harshly than other Experts.



This Expert appears to be marking two Competitors harder than the others. This may warrant some further investigation.



9.9.3 Analysis of Experts

This report provides some data on how the Experts performed their judgement assessment. There are four different measurements that can be selected: highest, lowest, above average, below average.

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Select a skill

01 Snowman Build...

Report Type

Analysis of Experts

Measure

Highest

Position	Competitor	Member	Expert					
			AA	AX	FS	HT	NP	
1	Competitor Five	HT	19/22	9/11	17/22	0/0	8/11	
2	Competitor Two	NP	17/22	9/11	15/22	5/11	0/0	
3	Competitor One	AA	0/0	10/11	18/22	9/11	16/22	
4	Competitor Four	FS	16/22	11/11	0/0	8/11	15/22	
5	Competitor Three	AX	19/22	0/0	7/11	8/11	19/22	

The matrix shows how often each Expert had that measurement for each Competitor. For example, in the screenshot above we can see that the Expert from Member AA gave Competitor Five the highest score 19 times out of the 22 times they marked their work.

The shading of the cells relates to the percentage of the values of the cells. The closer to 100 percent the closer the cell shade is to bright red. The closer to zero percent, the closer to blue the shade of the cell. This makes it easier to see patterns in the marking behaviour of the Experts.

9.9.4 Expert Head to Head

This report provides some summary statistics on the assessment behaviour of Experts.

Home

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Select a skill

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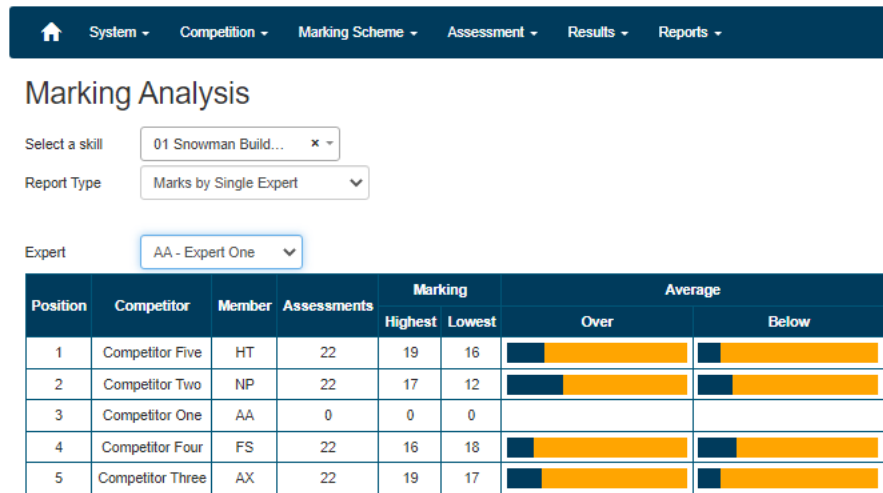
Report Type

Expert Head to Head

Name	Member	Assessments	Marking		Average	
			Highest	Lowest	Over	Below
Expert One	AA	88	71	63		
Expert One	AA	77	58	65		
Expert Three	AX	44	39	28		
Expert Four	FS	77	57	60		
Expert Five	HT	44	30	36		

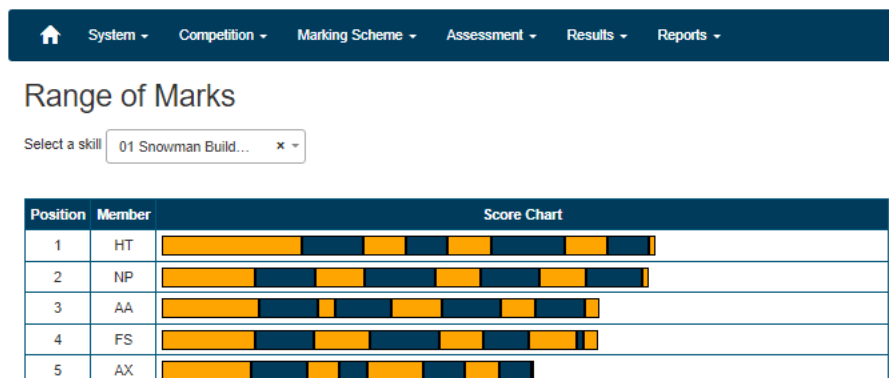
9.9.5 Marks by Single Expert

This report provides some summary statistics on the assessment behaviour of a single Expert in relation to all Competitors.



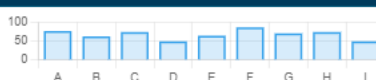
9.10 Range of Marks

This report is used to assess whether the skill had an appropriate level of difficulty and produced a sufficient spread of marks. Each Competitor's mark is broken down by criterion and displayed as a chart.



The numerical values for each criterion for every Competitor are also displayed, as well as a chart that shows the percentage of marks achieved for each Criterion.

The lower part report provides various statistics, such as the highest and lowest marks, the average, median, and standard deviation.

Competitor	Total	A	B	C	D	E	F	G	H	I	% Criterion Marks
(HT) Competitor Five	70.62	20.00	8.88	6.00	6.00	6.17	10.50	6.07	6.00	1.00	
(NP) Competitor Two	69.52	13.23	8.67	7.00	10.00	6.61	8.50	6.51	8.00	1.00	
(AA) Competitor One	62.34	13.94	8.34	2.50	8.00	7.11	8.50	4.95	7.00	2.00	
(FS) Competitor Four	62.21	13.31	8.44	8.00	10.00	6.11	6.50	6.85	1.00	2.00	
(AX) Competitor Three	52.69	12.68	8.11	4.50	4.00	7.83	6.00	5.07	4.50	0.00	
Analysis	Total	A	B	C	D	E	F	G	H	I	
Nominal Value	100.00	26.00	14.00	8.00	12.00	9.50	12.00	8.50	8.00	2.00	
Highest Mark	70.62	20.00	8.88	8.00	10.00	7.83	10.50	6.85	8.00	2.00	
Lowest Mark	52.69	12.68	8.11	2.50	4.00	6.11	6.00	4.95	1.00	0.00	
Difference	17.93	7.32	0.77	5.50	6.00	1.72	4.50	1.90	7.00	2.00	
Average	63.48	14.63	8.49	5.60	7.60	6.77	8.00	5.89	5.30	1.20	
Median	62.34	13.31	8.44	6.00	8.00	6.61	8.50	6.07	6.00	1.00	
Std. Deviation	6.43	2.71	0.27	1.93	2.33	0.64	1.61	0.76	2.44	0.75	

9.11 Competitor Performance

This report shows how Competitors performed against the WorldSkills Occupational Standards.



worldskills

WorldSkills Antarctica 2030

System Competition Marking Scheme Assessment Results Reports Admin User

Competitor Performance

Competitor Performance Report

This report shows how each Competitor performed against the WorldSkills Occupational Standards for their skill

Report Title

Section Title

Select a skill

[Create PDF](#)

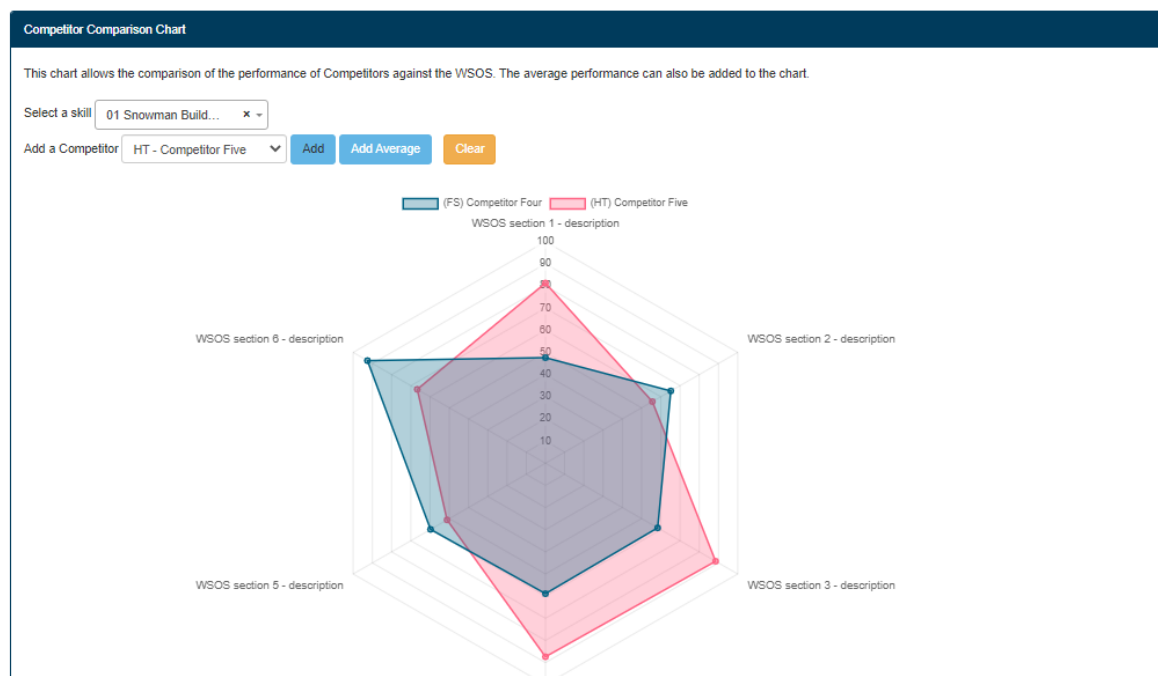
Competitor Comparison Chart

This chart allows the comparison of the performance of Competitors against the WSOS. The average performance can also be added to the chart.

Select a skill

The first form creates a document that features a page for each Competitor and lists what percentage of marks they achieved in each of the WorldSkills Occupational Standard sections. The title of the report and section title can be customised.

The second part of this report allows the creation of a radar chart that can be used to compare the performance of multiple Competitors. This allows to easily the strengths of each Competitor.



9.12 Competitor Result Summary

This report can generate a document that provides a Competitor's mark summary, final results, medal information, and performance against the WorldSkills Occupational Standards. This report can be accessed from the Results menu.



worldskills

WorldSkills Antarctica 2030

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Admin User

Competitor Result Summary

Generate Competitor Results Summary

Select a skill

01 Snowman Build...
x

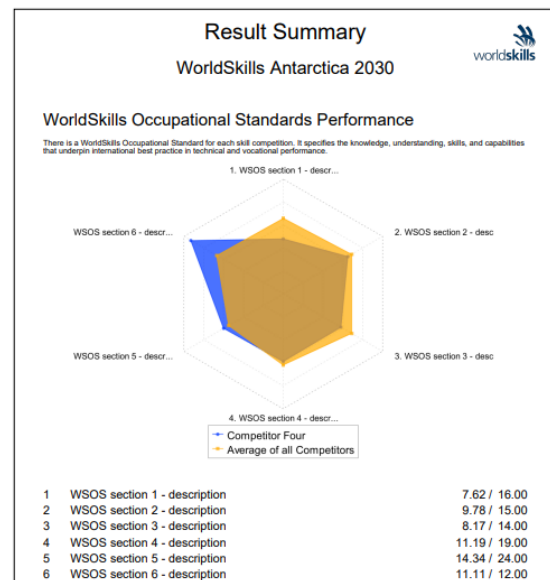
Member

Create PDF

Zip of Individual Competitors

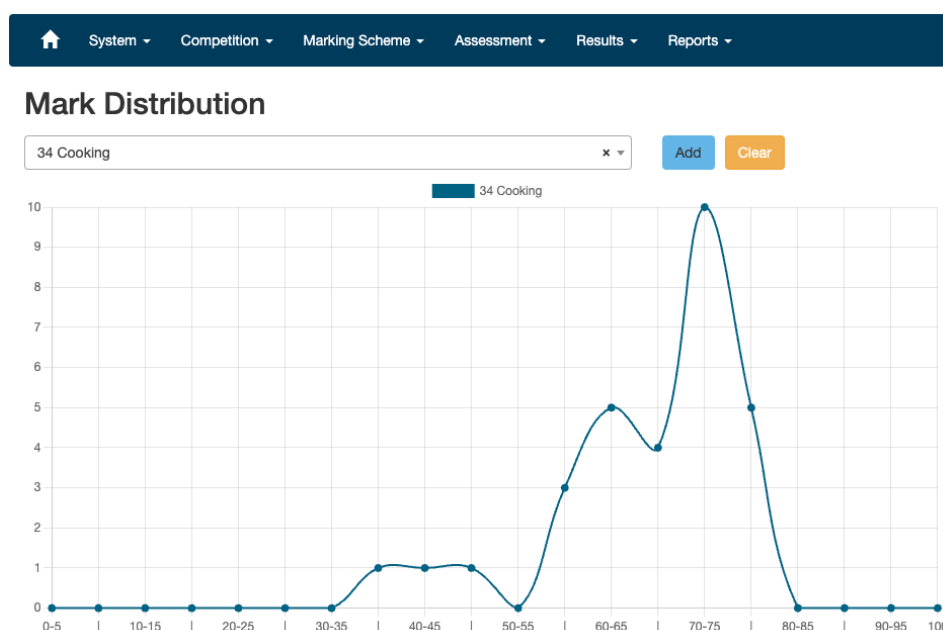
The document can be generated for a single Competitor, all Competitors in the skill, or a zip file containing individual files for each Competitor.

Result Summary					
WorldSkills Antarctica 2030					
Skill 01 - Snowman Building					
Competitor (FS) Competitor Four					
Criterion	Description	Day 1	Day 2	Day 3	
A	Accuracy and Scale of Main Components	3.51	7.00	0.95	
B	Design and Appearance of Extremities & Facial Elements	2.17	3.27	3.05	
C	Selection and Fit of Clothing	4.50	5.00	4.50	
D	Design and Stability of Plinth	4.50	4.00	3.50	
E	Accuracy and Scale of Environment	2.00	3.11	1.00	
F	Design and Appearance of Clothing	2.00	4.00	3.50	
G	Background Design and Appearance	0.84	1.67	4.34	
H	Health and Safety Observance	1.50	2.00	5.00	
I	Sustainability		2.00	4.00	
TOTAL		62.21			
		100.00			
		Marks	15.02	26.05	21.14
		Maximum	22.50	40.50	37.00
Final Results			Standardised Score		
1	723	Gold	NT	Competitor Five	
2	720	Silver	NP	Competitor Two	
3	700	Bronze	AA	Competitor One	
3	700	Bronze	FS	Competitor Four	
5	673		AK	Competitor Three	
			700		



9.13 Mark Distribution

This report creates a chart of the distribution of marks on the 100 scale.



The horizontal axis is the number of marks and the vertical axis is the number of Competitors. In the screenshot above we can see that ten Competitors achieved a mark between 70 – 75 while only four achieved a mark between 65 – 70.

9.14 Assessment Analysis

This screen produces a number of reports and charts.

Aspects to Mark – This produces a spreadsheet that details for each skill the number of aspects in the marking scheme, the number of Competitors, and the total number of aspects that will require marking for the skill competition.

Differentiation and Difficulty Report – This report shows how effective each aspect was in every skill in determining the abilities of each Competitor.

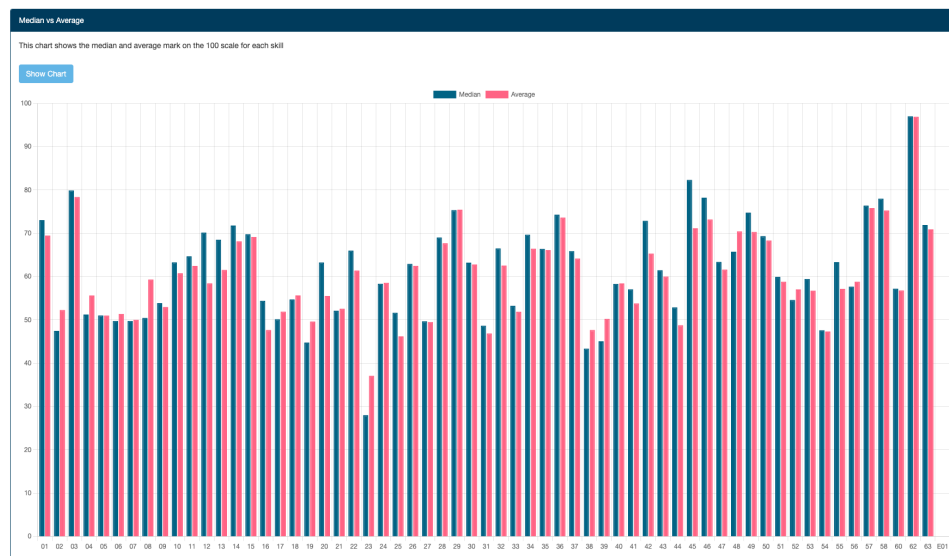
A difficulty index of one indicates that aspect was easy and every Competitor achieved full marks, whereas a difficulty index of zero indicates that no Competitor achieved any marks for that aspect.

A differentiation index of zero indicates that all Competitors achieved the same mark for the aspect and the aspect did not differentiate between the Competitors at all. A negative differentiation index means that the top performing Competitors tended to not achieve marks for this aspect but the low performing Competitors did. A positive differentiation index means that the top performing Competitors achieved marks for the aspect but low performing Competitors did not.

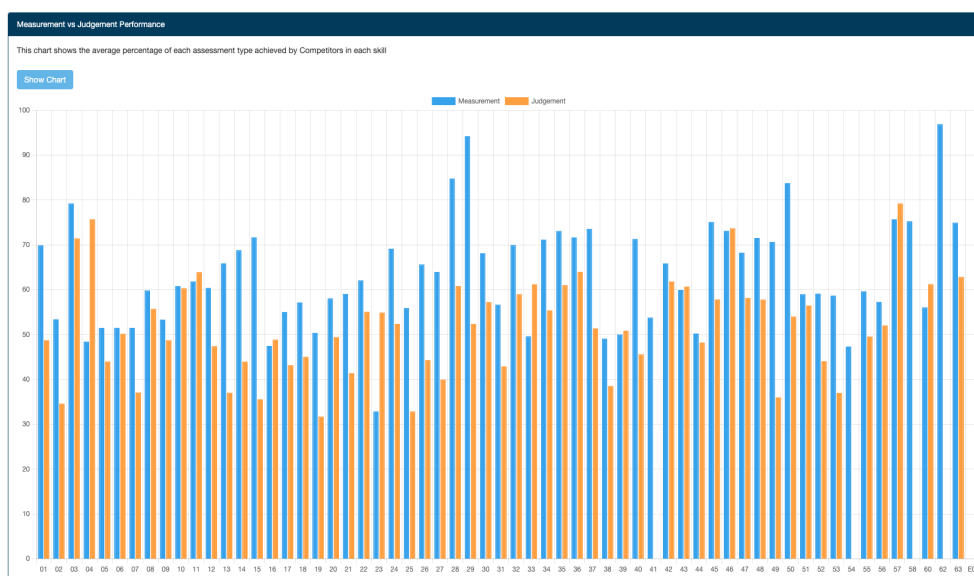
Invalid Judgement Scores – This report shows how often judgement assessment resulted in an invalid set of scores for those skills that marked directly in CIS using the tablet user interface or the PC marking user interface.

Invalid Judgement Scores				
This table measures the incidence of invalid judgement scores for each skill that uses tablet marking				
Show Table				
Skill	Total Marked	Total Marked Value	Total Invalid	Invalid %
02 Information Network Cabling	50	4.55	0	0.00
05 Mechanical Engineering CAD	105	6.00	4	3.81
09 IT Software Solutions for Business	136	8.00	13	9.559
17 Web Technologies	888	26.50	79	8.896
18 Electrical Installations	184	12.50	14	7.609
19 Industrial Control	1	1.50	0	0.00
20 Bricklaying	589	30.00	132	22.411
23 Mobile Robotics	155	17.50	1	0.645
27 Jewellery	1022	60.25	74	7.241
28 Floristry	630	71.00	52	8.254
29 Hairdressing	700	45.00	86	12.286
30 Beauty Therapy	367	38.00	70	19.074
31 Fashion Technology	1220	71.75	113	9.262
33 Automobile Technology	98	5.00	0	0.00
37 Landscape Gardening	752	42.50	105	13.963
39 IT Network Systems Administration	528	26.00	20	3.788
40 Graphic Design Technology	1035	50.25	251	24.251

Median vs Average – This chart shows the median and the average mark on the 100 scale for every skill.



Measurement vs Judgement Performance – This report shows the average percentage of each assessment type achieved by Competitors in each skill. This is useful for the designers of the marking scheme to see the effectiveness of each type of assessment.



Proportion of Measurement to Judgement – This breaks down the proportion of measurement to judgement assessment in each skill. The first report shows the proportion overall per skill. The second report breaks down the proportion by criterion.