

Version 1.0

About LandXML Validation

The LandXML Validation application is developed by GPS Lands (Singapore) Pte Ltd. It provides end user with the following functionalities:

- Upload SG LandXML files to GPS Lands LandXML Validation online service
- Retrieve validation results from the online service
- View validation summary for each uploaded SG LandXML file
- Save validation summary to PDF file to local disk storage

Product web page : https://www.gpslands.com/geocadastre/landxmlvalidation

License Requirements

LandXML Validation requires a Sentinel HASP hardware key with a valid **GeoCadastre** license for the application to operate.

To enquire about how to obtain a **GeoCadastre** Sentinel HASP hardware key, please contact **GPS Lands (Singapore) Pte Ltd**.

License Agreement

LandXML Validation requires the user to agree to a License Agreement during installation and during the first launch of the application after installation. Continued use of the application constitutes acceptance of the License Agreement.

System Requirements

LandXML Validation is compatible with Microsoft Windows 10/11 operating systems.

The application is dependent on the following:

- Microsoft .NET Framework 4.8 Runtime. Download the *Runtime* installer using this link: https://dotnet.microsoft.com/en-us/download/dotnet-framework/net48 or https://www.gpslands.com/geocadastre/landxmlvalidation
- Sentinel Runtime Environment. Download the *Sentinel HASP Runtime* installer using this link: https://www.gpslands.com/geocadastre/landxmlvalidation
- **An active internet connection** is required for uploading data file and retrieving validation results from the **LandXML Validation** online service.

Supported Data File Format

LandXML Validation only support user data files that conform to the format as specified in the "SG LandXML Mapping and Structure - Technical Paper for Singapore Land Authority, Version 1.4.0" specification document.

To obtain a copy of the SG LandXML specification document, go to the webpage at **Singapore Land Authority >> Newsroom >> Circulars** (https://www.sla.gov.sg/newsroom/circulars) and perform a search using the keyword "landxml".

The user is expected to ensure that the data file to be uploaded indeed conforms to the SG LandXML specification. Unexpected errors may occur if the uploaded data file is not of the correct format.

Limitations

LandXML Validation only support the analysis of tests in Sections 1, 2 and 4 (corresponding to GPT Server Validation performed by RS Portal).

User Interface

The user interface of LandXML Validation application is shown below:

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Perform Validation Image: Validation Results Options About To perform a new validation, drag-and-c op a single SG LandXML ile here or click the button below to select a SC LandXML file. Select SG LandXML file 4 1 2 3 4		

Click an item below for more information on the respective section:

- 1) Perform Validation
- Options 3)
- 2) Validation Results

- About 4)

Perform Validation

This section allows the user to select a SG LandXML file for uploading to the LandXML Validation online service.

Select SG LandXML file

A "Select LandXML file for validation..." window will be shown to allow the user to browse the local storage and to select a SG LandXML file for uploading.

The selected SG LandXML file will be uploaded for validation.

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	3204-2016	
	3290-2020	
	File name: SVY1109-2018-CP90000.aml]



Drag-and-drop SG LandXML file

User can also select a single SG LandXML file using the File Explorer and "drag" the file from File Explorer and "drop" it within the Perform Validation section.

The "dropped" SG LandXML file will be uploaded for validation.

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⊕ New - 从 C ि ▲ & ŵ …	Details	drag-and-drop a single SG LandXML file here or click the button below to select a SG LandXML file.
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3313-2019	63	
1 item 1 item selected 135 KB		

Figure 2: Drag-and-drop SG LandXML file from File Explorer

After a data file is uploaded, **LandXML Validation** application will disable further uploading until the validation of the current data file has competed.

Once validation has completed, the result will be downloaded automatically and a job entry will be added to the jobs table in the Validation Results section.

Validation Results

This section lists all the previously uploaded files and their validation results in the jobs table. The jobs table can be sorted by clicking any column header.

User have the option to perform various functions via the context menu (by selecting a job and using the right mouse button to click within the jobs table):

- View Validation Summary
- Save Validation Report
- Open LandXML folder
- Filter Results / Clear Filter
- Delete Selected Results

LandXML Validation Manual

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Figure 3: Use right mouse click within the jobs table to access the context menu

View Validation Summary

A separate "Validation Summary" window will be shown to display the validation result of the selected job. The following options are available from this window:

- Show Test Description: toggle the display of the Description column, which describe the meaning of each test.
- Filter by Analysis result: display only results of those tests that match the selected value. For example, set the value to "Fail" to view only those tests that failed analysis.
- Save Report: save the validation results to a PDF file.

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Job Nur LandXM	nber: 1109-2018 IL File: C:_E\temp\SGLX	Validation Date: \1109-2018\SVY1	2025-05-13 11:38:06 1109-2018-CP90000.xml	Tests:	32	Pass:	23	Fail: 2	N/A:	2
	Tests	Analysis	Error Message							L
9	Import Log	Fail	SUBMISSION SGLX ERRORS XML error: line 1 Parcel MK18-16968C has ge errors, and is not added to survey data. XML error: line 1 Parcel MK18-07191V has ge errors, and is not added to survey data.	ometry						
	1.1 Main Loop Traverse Leg Length	Pass								
	1.2 Sub Loop Traverse Leg Length	Pass								
	1.3 Demarcation Length	Pass								
	1.4 Side Shot Length	Pass								
	1.5 Side Shot to ISN Markers	Pass								
	1.6 Independent Check shots	Pass								
Show	w Test Description	Analysis: A						🗎 s	ave Report	

Figure 4: Validation Summary of a selected job

💀 Valid	ation Summary						—	0	×
Job Numl LandXML	ber: 1109-2018 L File: C:_E\temp	Va SGLX\11	idation Date: 2025-05-13 11:38:06 09-2018\SVY1109-2018-CP90000.xml	Tests	32	Pass: 23	Fail: 2	N/A:	2
	Tests	Analysis	Error Message						
• •	Import Log	Fail	SUBMISSION SGLX ERRORS XML error: line 1 Parcel MK18-16968C has geometry errors, and is not added to survey data. XML error: line 1 Parcel MK18-07191V has geometry errors, and is not added to survey data.						
0	1.9 Lot Demarcation	Fail	Station 2002 has no demarcation. Station 3001 has no demarcation. Station 3003 has no demarcation. Station 3005 has no demarcation. Station 3008 has no demarcation.						
Show	Test Description		Analysis: Fail ~				🗎 s	ave Report	

Figure 5: Validation Summary showing only tests where Analysis status is "Fail"

Save Validation Report

A "Save Validation Report..." window will be shown to allow the user to specify the location for saving the validation report of the selected job.

By default, the folder containing the LandXML file will be selected and the suggested filename of the report will be based on the job number and the validation date. User has the option to change the destination folder as well as the report filename.

Save Validation Re	port							×
$\leftarrow \rightarrow \checkmark \uparrow$	📒 « SGLX »	11	09-2018	~	С	Search 110	09-2018	Q
Organise 👻 Ne	w folder						≣ ▪	?
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Save as type:	PDF files (*.pdf)							~
∧ Hide Folders						Save	e Cance	el

Figure 6: Saving Validation Report

Open LandXML folder

If the LandXML file of the selected job exists on disk, a File Explorer window will be launched to display the contents of the folder containing the specific LandXML file.

Filter Results

Apply user-defined filter condition on all jobs in the jobs table and display only those job(s) that fulfil the filter condition.

Filter condition can be defined by either of the following methods:

- Select a single job in the jobs table, right mouse click within the jobs table, and select "Filter by..." item followed by one of the sub-menu items (eg. Job Number, Validation Date or LandXML File).
- Use the filter toolbar to define the filter column and filter text.

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Re	sults Folder: C:\P	rogra	mData\GPS Lands\LandXML Val	idatio	n		
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	1109-2018	≣	View Validation Summary		1	2	C:_E\temp\SGLX\1109-2018\SVY1109-2018-CP90000.xml
	3865-2024	B	Save Validation Report			3	C:_E\temp\SGLX\3865-2024\SVY3865-2024-CP92969.xml
	3865-2024	5	Open LandXML folder			3	C:_E\temp\SGLX\3865-2024\SVY3865-2024-CP92969.xml
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	3865-2024	T	Clear filter		12	Validation Date	E\temp\SGLX\3865-2024\SVY3865-2024-CP92969.xml
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Figure 7: Applying filter via (1) context menu or via (2) filter toolbar

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1109-2018	2025-05-13 11:28:18	23	2	2	C:_E\temp\SGLX\1109-2018\SVY1109-2018-CP90000.xi
1109-2018	2025-04-24 17:01:13	20	3	2	C:_E\temp\SGLX\1109-2018\SVY1109-2018-CP90000.xt
1109-2018	2025-04-22 18:34:42	20	3	2	C:_E\temp\SGLX\1109-2018\SVY1109-2018-CP90000.xr
1109-2018	2025-04-09 16:35:23	20	3	2	C:_E\temp\SGLX\1109-2018\SVY1109-2018-CP90000.xt
1109-2018	2025-03-27 17:56:31	20	3	2	C:_E\temp\SGLX\1109-2018\SVY1109-2018-CP90000.xt

Figure 8: After applying filter on the Job Number

Clear Filter

Clear the current filter condition and display all jobs in the jobs table.

This menu option will only be available when a filter condition has been set previously.

Delete Selected Results

Delete selected result(s) from the jobs table.

Only the result(s) will be removed from the jobs table. Any existing LandXML file(s) and previously saved report file(s) will not be deleted.

Options

The following options are available:

- Auto delete old results.
- Duration for keeping old results.
- Auto check for updates.
- Interval for update checks.

About

View User Manual

Open the LandXML Validation Manual using the system default PDF viewer.

View License Agreement

Display information about the LandXML Validation License Agreement.

Copy License Key

Copy the displayed License Key to the system clipboard.

Contact Information

Contact us for more information on the LandXML Validation application or online service.



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