



T-404-LOKA LOKAVERKEFNI

MAREL
CLOUD ANALYTICS

User Manual

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1 Preface

Cloud Analytics is an *Innova* monitoring and analytics solution. It collects data from Innova systems, deployed all over the world, and represents them in a human readable way with an intuitive user interface. Most of the data consists of errors and other fault logs. The solution has all the processed data assembled together to create a full scale picture of where the data is coming from and how frequent it is.

1.1 Purpose

The purpose of this document is to provide a step-by-step guide on how to use the Cloud Analytics system, and give insight into how the user interface works.

1.2 Maintenance

This document is maintained by *Team Pretzel*.

If you have any issues or problems with this manual, please contact:

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1.3 Version

Current document version is 1.0.0 as of 13.05.2016.

1.3.1 History

Date	Version	Comments	Author
13.05.2016	1.0.0	Initial version.	GRG

2 Getting Started

Use this link to access the Cloud Analytics system:

<http://innovaregistry.azurewebsites.net/>

3 Using the System

This section provides a general walkthrough of the system.

3.1 Top Menu Bar

On top of the screen is a menu bar. This bar is static, meaning that it is always available for the user. The title in the top left corner, *Innova Cloud Analytics*, is a link back to the homepage. The center of the menu bar provides a breadcrumb trail which reveals the user's location in the system, and can furthermore be used as links to previous locations.

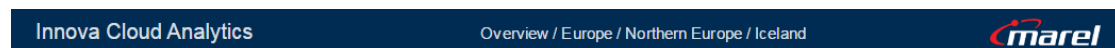


Figure 1: Top Menu Bar

3.2 Navigation Bar

The left-hand side of the homepage provides a navigation bar where the user can navigate to various screens. This navigation bar is also static and therefore always available. The first link in the navigation bar, *Overview*, directs the user back to the Overview Screen (home page). The following 16 links are used to filter the provided data by a single region or sub-region. The last link in the navigation bar, *Registry*, directs the user to the Registry Screen. The Registry Screen enables the user to register a new site, edit registered sites or remove them.

OVERVIEW
EUROPE
Northern Europe
Western Europe
Eastern Europe
NORTHERN AMERICA
North America
Central America
Caribbean
SOUTH AMERICA
AFRICA & MIDDLE EAST
Africa
Middle East
ASIA
Asia
South East Asia
OCEANIA
REGISTRY

Figure 2: Navigation Bar

3.3 Overview Screen

The three main screens for the Cloud Analytics system are essentially the same but at different levels of detail. The Overview Screen shows on a world map what regions contain sites with critical (error or fatal) logs out of the six available main regions for the last 24 hours. A dot over the region represents how many of these critical logs are found in the region and is scaled in relation to other dots with more/fewer critical logs. A list also appears to the right showing the same information without having to hover over a specific dot.

There is also a timeline on the bottom of the page which shows in chronological order at what time and frequency errors appear. The time frame can be adjusted via two sliders at the bottom. This also affects the map. So if errors only appeared in a region in the last ten minutes, and the right slider is dragged to the left further than ten minutes, then the region will disappear from the map.

A quick access navigation bar is located to the left. It has links for every region and sub-region in the system as well as an *Overview* link, which takes the user back to the Overview Screen. Clicking a dot on the map or a region on the list to the right takes the user to the corresponding region screen.

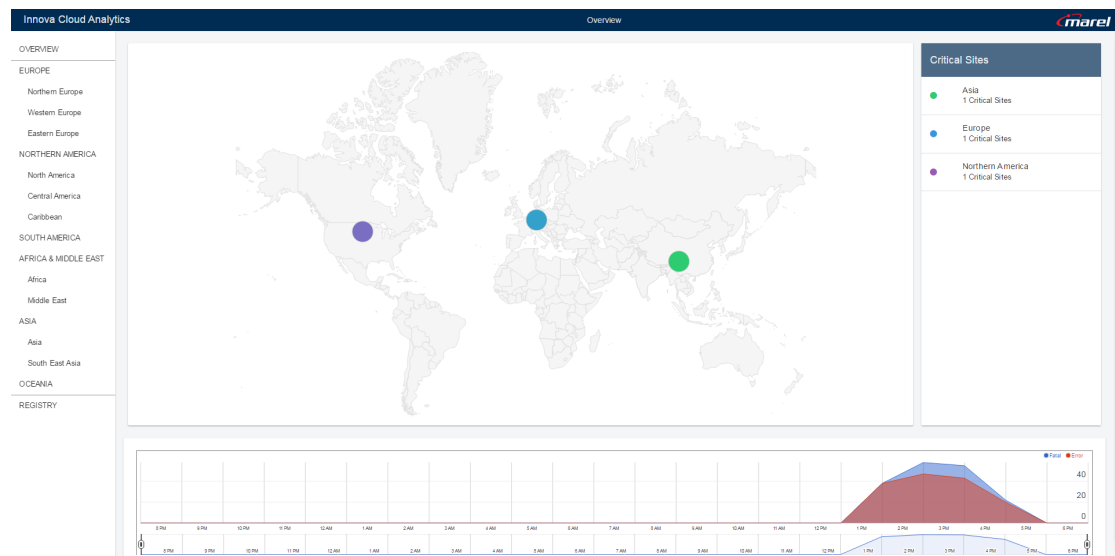


Figure 3: Overview Screen

3.4 Region and Sub-Region Screens

As mentioned before these screens are virtually the same as the Overview Screen. However, for a region screen, sub-regions and their basic information, are displayed. A sub-region may be something like Northern Europe, which obviously belongs to the Europe region. South America and Oceania do not contain any sub-regions and are therefore considered a hybrid (sub)region. In the same way, countries with critical logs are shown on the Sub-Region Screen.

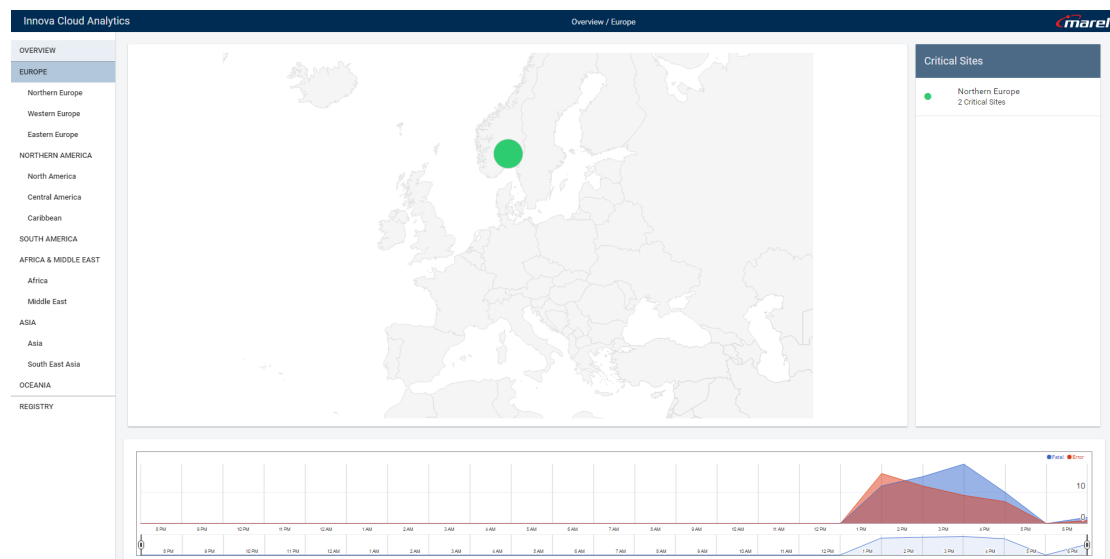


Figure 4: Region Screen

The exact same navigation is used in these screens as in the Overview. Dots can be clicked or their counter-part on the right to reach the next screen.

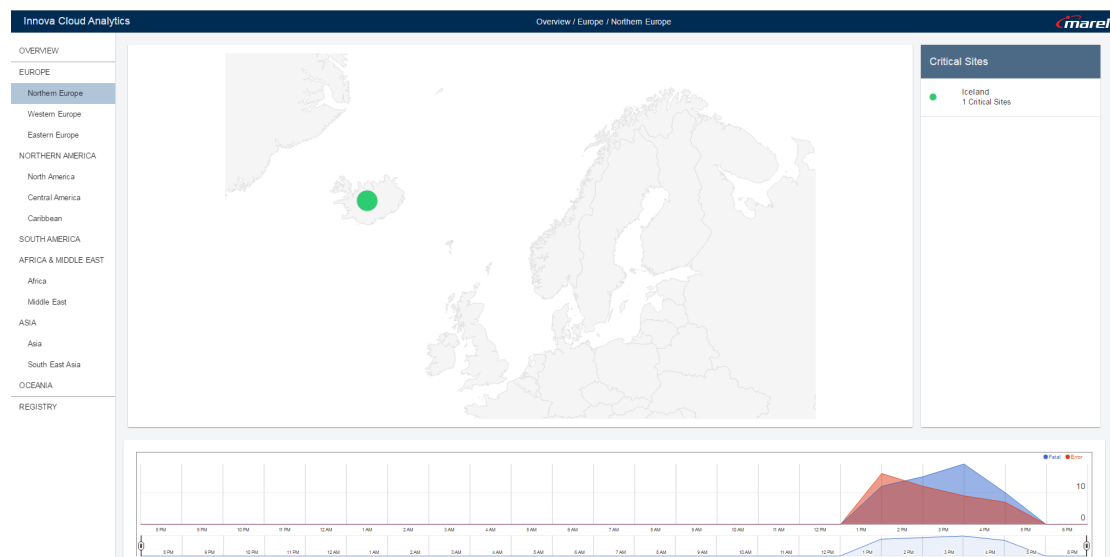


Figure 5: Subregion Screen

3.5 Country Screen

A country, containing sites with critical errors, can be selected in the Sub-Region Screen with the same methods, i.e. by pressing a dot on the map or an entry in list on the right-hand side. The user will now navigate to the Country Screen where each dot on the map, and entry in the list, represents a particular site in the selected country, containing critical errors.

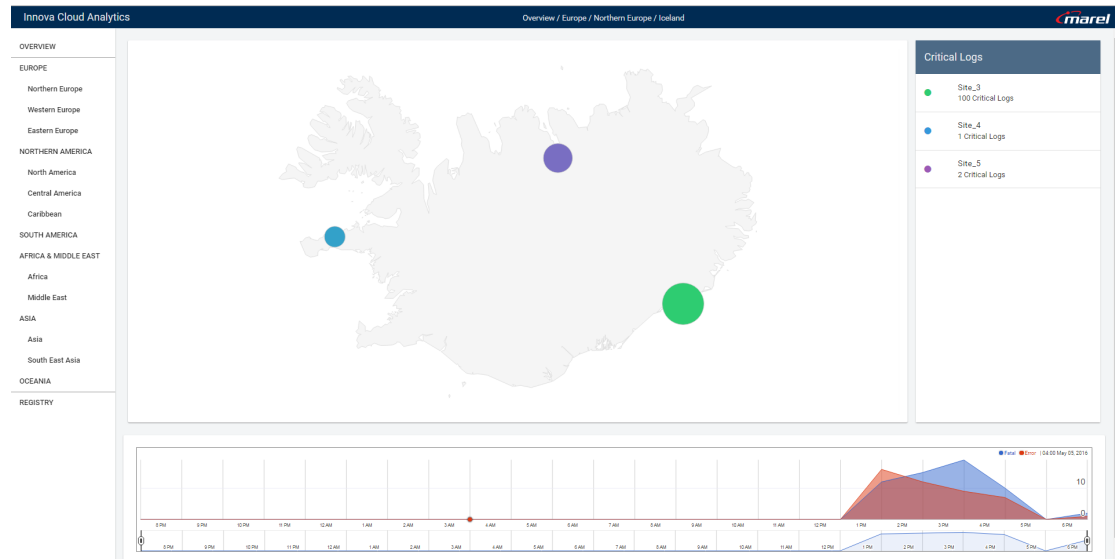


Figure 6: Country Screen

3.6 Site Screen

Selecting a site on the Country Screen navigates the user to the Site Screen. This screen contains information about all logs (not just errors or fatal errors) for that particular site. The data about these logs is displayed in a table. Each entry in the table represents a single log and shows the registered time, name of the log and status.

The user is able to filter the error logs by type using the dropdown menu in the top-right corner of the table.

The user can also reorder the table entries by time, name and status by clicking the corresponding column headers in the table. In the bottom right-corner of the table the user can select table pages, increase/decrease the number of rows per page and scroll through each page of the table.

Time	Log	Type / Status	Details
5. May 16 17:22:27	base_log	Error	SHOW LOG
5. May 16 17:22:17	base_log	Warning	SHOW LOG
5. May 16 17:22:07	sysprogram_log	Running	SHOW LOG
5. May 16 17:21:57	base_log	Warning	SHOW LOG
5. May 16 17:21:47	device_log	Online	SHOW LOG
5. May 16 17:21:37	sysprogram_log	Dead	SHOW LOG
5. May 16 17:21:27	device_log	Online	SHOW LOG

Figure 7: Site Screen

The last column for each entry contains a button, *Show Log*, which is used to show detailed information about each log. Pressing this button opens up a dialog containing comprehensive facts about the selected error.

Log Details

Log Type

base_log

Time

6. May 16 15:13:59

Message

User

user_name

Sequence

1

Application

PCHOST-WinUI/0.5.3.1.0

Object

Marel.Mp5.Base.UI.Windows.WindowsController

Record Type

UnhandledEx

Code 1

0

Code 2

0

Code 3

0

Failed to store persistent data:

Info

Exception type is System.Net.Sockets.SocketExceptionError stack:1) No connection could be made because the target machine actively refused it 1.1.1.1:9999Stack trace:1) Server stack trace: at System.Net.Sockets.Socket.DoConnect(EndPoint endPointSnapshot, SocketAddress socketAddress) at System.Net.Sockets.Socket.Connect(EndPoint remoteEP) at System.Runtime.Remoting.Channels.RemoteConnection.CreateNewSocket() at System.Runtime.Remoting.Channels.RemoteConnection.GetSocket() at System.Runtime.Remoting.Channels.SocketCache.GetSocket(String machinePortAndSid, Boolean openNew) at System.Runtime.Remoting.Channels.Tcp.TcpClientTransportSink.SendRequestWithRetry(Message msg, ITransportHeaders requestHeaders, Stream requestStream) at System.Runtime.Remoting.Channels.Tcp.TcpClientTransportSink.ProcessMessage(Message msg, ITransportHeaders requestHeaders, Stream requestStream, ITransportHeaders& responseHeaders, Stream& responseStream) at Marel.Mp5.Base.UI.AuthenticationClientSink.ProcessMessage(Message msg, ITransportHeaders requestHeaders, Stream requestStream, ITransportHeaders& responseHeaders, Stream& responseStream) at System.Runtime.Remoting.Channels.BinaryClientFormatterSink.SyncProcessMessage(Message msg) at System.Runtime.Remoting.Proxies.RealProxy.PrivateInvoke(MessageData& msgData, Int32 type) at Marel.Mp5.Base.ClientSupport.IModelFactory.GetService(String type) at Marel.Mp5.Base.UI.BaseController.StorePersistentData(Int16 elementType, Int32 element, Int32 application, Object obj)

CLOSE

Figure 8: Details Dialog

3.7 Registry Screen

Clicking the **Registry** link in the navigation bar on the left-hand side will send the user to the Registry Screen. This screen contains information about the registered sites and allows the user to register, edit and remove sites. Each site of the system is displayed as an entry in a table. The user can display the site's connection key by clicking the *Show Key* button, which is located in the last column of each row.

Site	Customer	Innova Version	Connection State	State	Key
<input type="checkbox"/> site_1	customer_1	5.0.1	Disconnected	Enabled	SHOW KEY
<input type="checkbox"/> site_2	customer_2	5.2.0	Disconnected	Enabled	SHOW KEY
<input type="checkbox"/> site_3	customer_3	5.5.0	Disconnected	Enabled	SHOW KEY
<input type="checkbox"/> site_4	customer_4	5.2.0	Connected	Enabled	SHOW KEY
<input type="checkbox"/> site_5	customer_5	5.5.0	Disconnected	Enabled	SHOW KEY
<input type="checkbox"/> site_6	customer_6	5.3.1	Disconnected	Enabled	SHOW KEY

Figure 9: Registry Screen

The user can add a new site by clicking the *Add New Site* button located in the bar above the table. When the button is clicked, a dialog appears. The dialog contains input fields for the user to fill out, as well as a map for the location of the site. The dialog contains three buttons; *Get Location*, *Clear*, and *Save*. To cancel the registration the user can press the *X* in the top-right corner of the dialog. By clicking the *Get Location* button the longitude and latitude fields are automatically filled with the user's location. The map in the dialog is also updated accordingly. The marker on the map can also be used to fill out the longitude and latitude fields. Pressing the *Clear* button will clear the user's input, but the *Save* button will register the new site (if the input fields are valid) and close the dialog. Once the registration is complete the new site will be displayed in the table.

To edit or remove a site the user has to select a site from the table by selecting the checkbox beside the site's name in the table. This action will allow the user to either click the *Edit* or *Remove* button, located in the bar above the table. If no site is selected these buttons are inactive. If the user presses the *Remove* button after selecting a site, a confirm dialog will be prompted. In the dialog the user has the option to *Confirm* the action, or *Cancel* it. If the *Edit* button is pressed a register dialog is prompted where the user can edit the information about the selected site, with the same set of tools provided as if registering a new site.

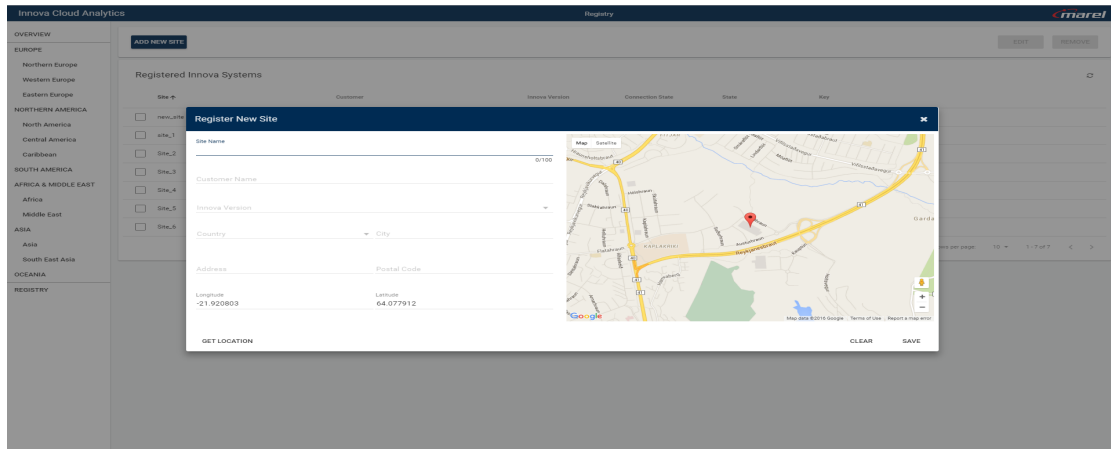


Figure 10: Register Dialog

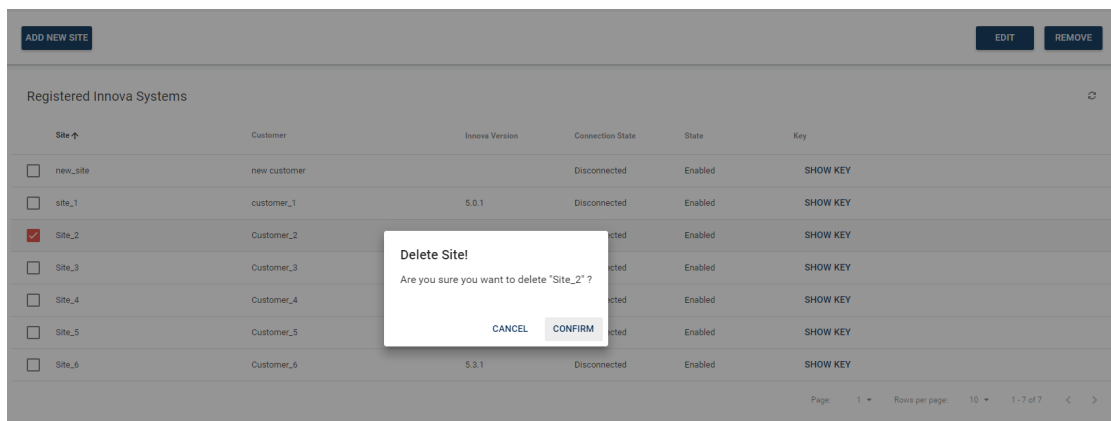


Figure 11: Delete Dialog

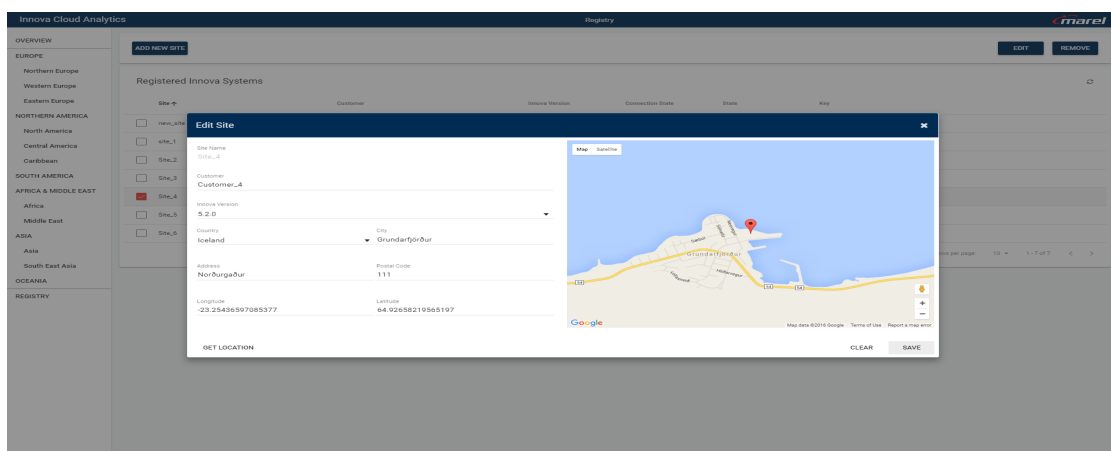


Figure 12: Edit Dialog

3.8 Toasts

The system provides notifications called toasts in the top right corner of the screen. These toasts will pop up when errors occur or when successfully registering/updating a site in the registry. Successful toasts contain a short message confirming that the performed action worked correctly.

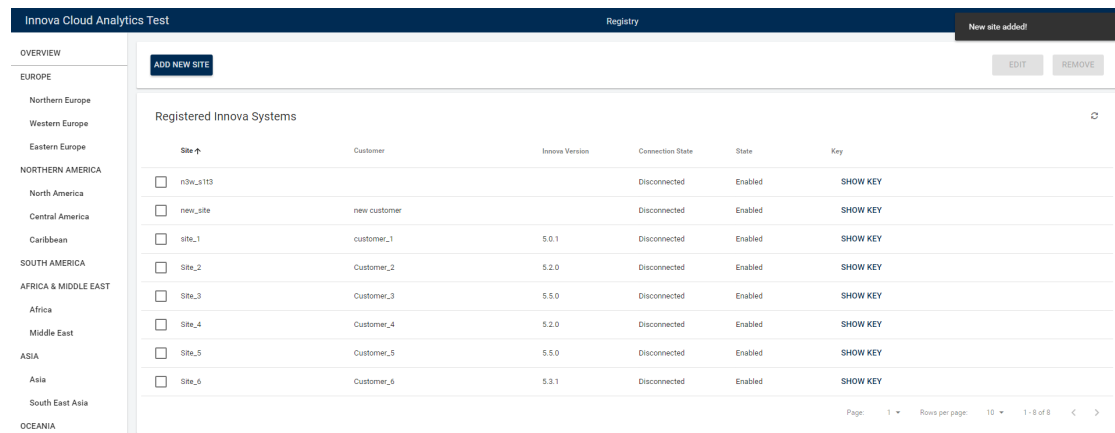


Figure 13: Success Toast

If an error occurs the user can press the *More Info* button of the toast. Clicking it will open up a dialog with an explanation of why the error occurred.

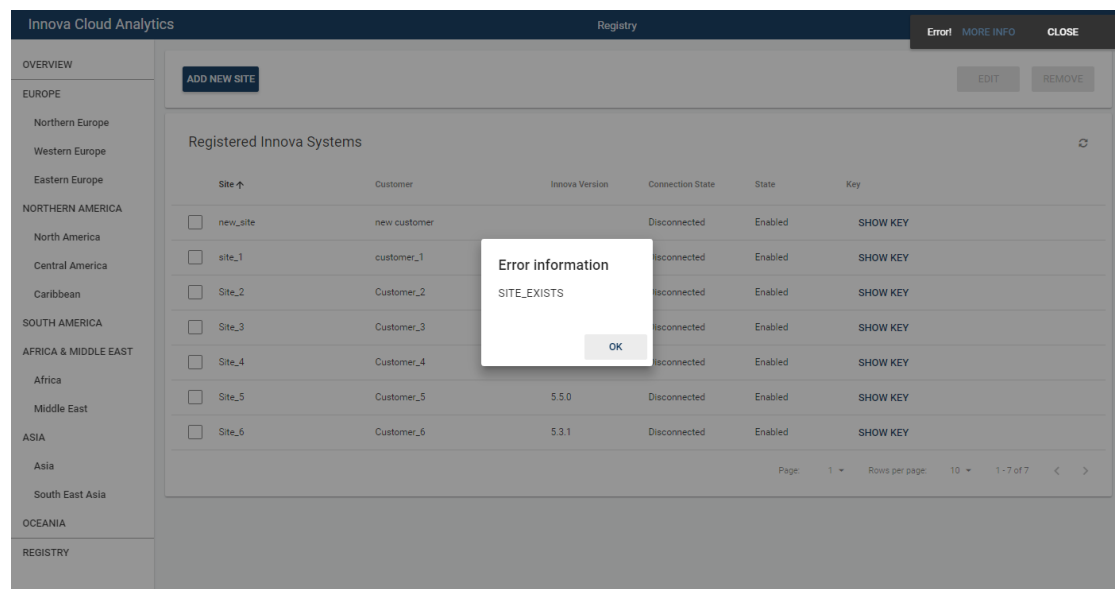


Figure 14: Error Toast and More Info Dialog