



Replacing ORS with Apex

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User Guide

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Chapter 1: Replacing ORS with Apex

Before replacing ORS with Apex

Apex provides a centralized vantage point for network performance across all of the Observer Platform. It combines flow technologies, captured packets, system health, and expert analysis to provide an overall picture of service health. Apex presents integrated views of application, network, and infrastructure performance to ensure critical business processes function smoothly and IT organizational goals are supported.

Understanding the benefits of Apex

Apex is full of dynamic reporting tools for both novices and power users. All interaction with Apex occurs in a web browser, so any person with the right permissions can create and consume reports from anywhere on the network using a browser.

You can achieve visibility of everything the Observer Platform has seen and collected. Apex presents dashboard views of application, network, and infrastructure performance to ensure applications function smoothly and your IT organizational goals are supported. This trending data is supplied by the data sources connected to Apex. If an established connection is broken between the data source and Apex, any data transfer that goes "missing" from Apex during the downtime will be backfilled after the connection is re-established (up to a configured number of previous collection days).

The responsive HTML5 interface makes it simple for individuals and teams to create dashboards. Dashboards can be made intuitively in just a few drag-and-drop operations, or they can be perfectly tailored with advanced filtering, drill-downs, and sophisticated performance and baseline measurements. Everyone is able to contribute with Apex.

Metrics and measurements are intelligently chosen; just describe what you want to see. The most applicable network trending sources are automatically chosen for you. This means if the trending data exists, contextually-appropriate data will be displayed regardless of how or where it was captured.

Track the paths of your multi-tier applications and get insight. Apex offers application dependency mapping (ADM), which automates the discovery of application interdependencies. The results are dynamically created maps, built to visualize those complex relationships with simplified clarity. It provides critical information for locating issues and migrating applications to new environments, plus you can see the end-user experience at each intersection.

Widgets and dashboards you create can be shared between your colleagues if you choose to share them. By default, what you create on your own will be associated with your user. You can promote these items to be viewable and usable by other users, so your work efforts do not have to be duplicated by other people. Any changes made to a promoted item will cascade to all the places it is used. But don't worry: you can use filtering to create unique variations of the same base item.

If you always want the latest-and-greatest stable version, you can have it in a few clicks—or even automate it. Be part of the release channel, and get updates and patches directly from VIAVI. Product updates, including new minor release and patches can be handled automatically or on-demand. Schedule the download, schedule the installation, or schedule both, and never look far for updates again. You can even perform rollbacks (downgrades) to previous patches, so feel confident moving forward.

What is needed for replacement

To successfully replace ORS with Apex, you must be aware of some items before beginning.

Table 1. What to collect before replacing ORS with Apex

What to have or understand	Purpose for having or knowing
Version 17 license information for Apex	During the first launch of Apex, you must provide your version 17 license details. If you plan to be managed by OMS instead, have your v17 license added to OMS first.
Version 17 installation file for Apex	This file is necessary for installing Apex.
The user name and password to Apex is: admin / admin	The first login to Apex should need this user name and password. This user name and password should be used for configuring user access.
Reports made in ORS cannot be viewed with Apex	Consider keeping ORS installed on a second system or system image if you need access to legacy reports. Your existing reports cannot, and will not, work in OMS. You must recreate your reports in Apex.
Existing trending data can be deleted if you have no need for ORS reports	The trending information in ORS is not compatible with Apex. Therefore, the information cannot be used and is safe to delete if you wish. The network trending data folder was typically <code>C:\Program Files\ObserverReportingServer\Data</code> , but you should check in Options > Program Settings > General Settings in the

What to have or understand**Purpose for having or knowing**

Network trending folder box. The hard disk assignment (like D:\) you specify here will be used in Apex.

Name changes from ORS to Apex

Some of the vocabulary used for the terms and features of ORS have changed in Apex. We recommend reviewing these changes during the first launch of Apex.

Old name	New name
Observer Reporting Server (ORS)	Observer Apex
Report	Dashboard
Report Element	Widget
Primary-Secondary Server Configuration	Failover

Installing and licensing

Follow the specific details for installing the software and getting your product licensed.

How to install Apex

Apex is an intelligent reporting solution that users connect to using a web browser. We recommend you install Apex on a server or rack-mounted appliance. If you are already using Apex but planning to upgrade, please see

Prerequisite(s):

Ensure you have the latest version of Apex before continuing. Download the latest version from our website: <http://update.viavisolutions.com/latest/ObserverApexSetup64.exe>. See for a list of supported operating systems.

Caution: Do not uninstall your product prior to or after upgrading unless you intend to remove the product from your system. Beginning with Observer Platform 17.0, each Observer Platform product creates a security certificate that uniquely identifies it when it is installed. If you uninstall your product prior to upgrading, you will lose the trust relationship established by the security certificate and must re-authenticate. Uninstalling and reinstalling creates a new certificate. The new certificate will be automatically rejected by other Observer Platform products that had had a pre-existing association with the asset ID of the reinstalled software. For more details about the certificates, see [Understanding the certificate trust model](#).

To install Apex:

1. We recommend [backing up your existing installation](#) if applicable.
2. Simply run the self-extracting executable and follow the installation prompts.

You may be prompted to license the application during its first launch. This can happen when performing a clean installation, such as after a hard drive reformat. Provide your credentials if prompted.

How to license Apex

Apex is designed to be used as a server-based application.

If Apex is installed along with an Observer Platform product but *not* licensed, you have Apex Lite. Apex Lite provides limited reporting capabilities.

To license and activate Apex:

1. Install and launch the application.
2. Your default web browser will open to the following URL: `https://localhost/OA`

Example: If it does not, type the URL in the location bar of your web browser and press **Enter**.

3. Follow the on-screen instructions provided by your web browser to accept the self-signed security certificate.

Your web browser must accept the self-signed security certificate to continue.

4. In the Apex web interface, click **System > Settings**.
5. In the **System Settings** pane, click **License**.
6. Enter the **Contact/Department, Company**, and **License Information** exactly how it is written in your license document.
7. Click the accept icon ✓.

You successfully licensed and activated your product.

If licensing and activating your product remains unsuccessful, please contact [Technical Support](#).

Licensing and general settings

Apex requires a license; Apex Lite does not. The General Settings menu sets the asset name, data transfer settings, DNS servers, data retention, and the logo used for PDF reports.

How to begin using Apex

After Apex is properly installed, all interactions with Apex will occur through a web browser. To begin using Apex, log in to Apex.

Prerequisite(s):

A compatible web browser is required.

- ◆ Internet Explorer 10.0 or later
 - ◆ Microsoft Edge
 - ◆ Mozilla Firefox
 - ◆ Google Chrome
-

Tip! Do you need to license and activate Apex? See the instructions at [How to license Apex \(page 6\)](#).

1. Open a compatible web browser, and type the following URL into the location bar: **https://ApexHost/oa** replacing "ApexHost" with the host name or IP address of the system where Apex is installed and running.

You may notice a security certificate warning; this is normal for a self-signed certificate.

2. Log in to Apex using a user name and password managed by Apex or OMS (sold separately).

Tip! The default user name is **admin**, and the default password is **admin**, and it is case-sensitive.

You successfully logged in to Apex. All of your interactions with Apex will occur in this web interface.

General settings

System > Settings includes the asset name, data transfer settings, DNS servers, data retention, and the logo used for PDF reports.

Field	Description
Apex asset name	This changeable name identifies Apex to other VIAVI products.
Enable Session Timeout	If selected, user sessions terminate after N-minutes of inactivity. This minimizes the chances of an unattended user session being hijacked.
Session Timeout (Minutes)	Sets the duration of user inactivity before a session terminates.
Data storage location	Data transferred to Apex is stored in this directory. All dashboards are populated with the data inside. The default file path is <code>C:\Program Files\Observer Apex\Data</code> for software-only installations and <code>D:\DATA</code> if a hardware appliance.
Primary DNS Server	The IP address of a primary DNS server. If two servers are declared, the primary is used unless it is unreachable. Valid Input: Valid addresses are IPv4 only. Example: 8.8.8.8
Secondary DNS Server	The IP address of a secondary DNS server. The secondary server is used if the primary becomes unreachable. Valid Input: Valid addresses are IPv4 only. Example: 8.8.8.8
Number of days to retain data files	Sets the maximum number of days to keep Apex trending data files, after which they are automatically deleted.

Field	Description
	<p>Leave blank to always retain trending data files, although you might run out of free disk space. Deletions occur at midnight UTC time.</p> <p>Example: 365</p>
Cover page logo	<p>Every PDF report includes this image on its cover page. The image can be changed.</p> <p>Browse Choose a local SVG image to upload and use.</p> <p>Revert (x) Discard a newly uploaded image so it is not saved.</p> <p>Default Resets the image to the Apex default.</p> <p>Only SVG images are supported. Click 'Apply' to save your changes.</p> <p>The image is saved as <code>C:\Program Files\Common Files\Observer Web Server\htdocs\OA\less\images\logo.svg</code>. The file name itself is renamed to <code>logo.svg</code> from whatever it was called before.</p> <p>Must I resize my image before uploading? What are the best dimensions? No, you do not need to resize your image. Dimensions are irrelevant with a vector-based image like SVG. The logo will be scaled appropriately for the report when it is generated.</p>

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How to have Apex managed by OMS

If your organization uses OMS and wants Apex to be a managed asset, you must integrate Apex into OMS. Doing so allows functionality like user authentication and authorization, plus software version control.

Caution: By following these steps, Apex will be managed by OMS. After the connection is made, *you will be unable to disable the management* within Apex. Therefore, the only way to remove Apex from being managed is to remove the asset from within OMS.

To change Apex to be managed by OMS:

1. In the web interface, click **System > Settings**.
2. In the **System Settings** pane, click **Manage by OMS**.
3. Select **Manage Asset with OMS**.
4. In the **OMS Server IP/DNS Name** box, type the IP address or DNS name of the OMS server.

5. Type OMS administrator credentials into the **User Name** and **Password** boxes.

The credentials must have permission to add new assets and/or licenses to OMS (depending on which is needed), or the asset must already be defined and the user must have access to the asset and a license number must be present.

6. Click the accept icon ✓.

If successful, Apex should now be managed by OMS.

How to retrieve a list of available Apex versions

A listing of Apex software versions to upgrade or downgrade to is available directly in Apex. Connect to the VIAVI upgrade repository to retrieve the latest listing of available versions.

Note: Interacting with the upgrade repository requires web connectivity over TCP port 80 or 8008 (by default) on the Apex system. This can be achieved with direct connectivity from OMS to the web or by configuring a proxy in the proxy configuration settings of OMS for downloads. The upgrade repository is hosted by VIAVI and no public mirrors are used.

To ensure your product is using the latest code available, always check the in-product update capability even if you have recently installed. It is strongly recommended that all product updates and upgrade are performed using the in-product update methods instead of installing the executable using Windows File Explorer.

To retrieve a list of available versions, click **System > Update** .

To retrieve a list of available versions:

1. In the web interface, click **System > Update**.

Apex connects to the upgrade repository and displays the versions available for download. Release notes for each version are available for viewing.

Start using Apex

Apex allows you to accurately assess the impact of mission-critical applications on your business through extensive dashboards. Apex also provides auto-baselining capabilities for establishing benchmarks, understanding typical performance levels, and running day-to-day comparisons.

How to add a data source

Adding a new data source tells Apex about the Observer Platform product you want to get data from. At least one data source is needed for Apex to fully operate.

To add a data source:

1. In the web interface, click **Configuration > Data**.
2. Click **Data Sources**.
3. Click the new icon .

4. In the **Edit** pane, provide information about the data source and credentials to connect to it.
5. Click the accept icon ✓.

The data source is added to Apex, and Apex attempts to communicate with the data source. The **Connection State** indicator shows the connection status in real time; it is not necessary to refresh the web page.

Note: No network trending data is transferred during this process.

You *must* assign at least one data source to a business group to complete your configuration. This is because network trending data is only transferred to Apex after a data source is assigned to a business group. For details, see [How to assign data sources \(page 11\)](#).

How to create a business group

Business groups can be created to organize your data sources by department, location, multi-tiered application, or for other reasons. A business group with data sources is required for widgets and dashboards to display data.

To create a business group:

1. In the web interface, click **Configuration > Data**.
2. In the **Data** pane, click **Business Groups**.
3. Click the new icon .
4. Type a name for your business group.
5. (Optional) If you want to combine other business groups into this business group, use a drag-and-drop operation in the **Included Business Groups** tab.
6. (Optional) If you want to immediately add data sources, complete the following:
 - a. In the **Edit** pane, click the **Data Sources** tab.
 - b. Move a probe instance from **Available Data Sources** to **Selected Data Sources** using a drag-and-drop operation.(Optional) You can repeat the drag-and-drop operation to assign more data sources to the business group.
7. Click the accept icon ✓.

You successfully created a business group. You assigned, or will assign in the future, one or more data sources to the business group you created. All selectable business groups appear in a list in the upper-right corner of **Dashboards** under **Configuration**

How to assign a data source

Data sources must be added to business groups before their data can be transferred to Apex.

Prerequisite(s):

You must have a data source before you can assign it to a business group. If you need to create a data source before continuing, see [How to add a data source \(page 10\)](#).

To assign a data source:

1. In the web interface, click **Configuration > Data**.
2. In the **Data** pane, click the **Business Groups** tab.
3. Begin editing a business group by clicking its name.
4. In the **Edit** pane, click the **Data Sources** tab.
5. Move a probe instance from **Available Data Sources** to **Selected Data Sources** using a drag-and-drop operation.

You can repeat the drag-and-drop operation to assign more data sources to the business group.

6. Click the accept icon ✓.

Apex contacts the data source to request and retrieve its trending data. The value of **Data transfer delay (minutes)** at controls the number of minutes to wait after **Data transfer period (minutes)** finishes before retrieving the trending data.

For example, if **Data transfer delay (minutes)** is set to **2** minutes, trending data from your assigned data source will begin transferring two minutes after the data source has finished its statistics collection interval.

How to create a dashboard

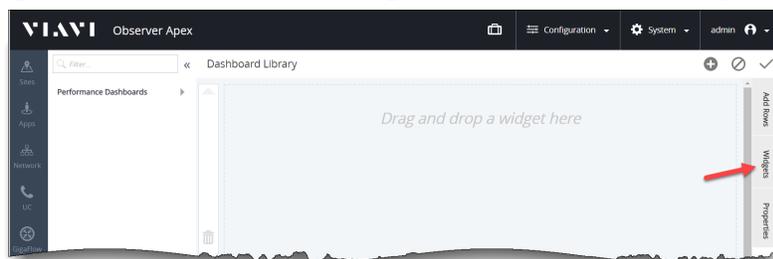
You can report on metrics that matter to you and your organization. Do this by creating a dashboard and populating it with widgets.

To create a dashboard and populate it with widgets:

1. In the web interface, click **Configuration > Dashboard Library**.
2. Click the new icon ⊕.

The dashboard designer starts, indicated by the words "Drag and drop a widget here" and the appearance of rightmost tabs.

Figure 1: The dashboard designer can be identified by its rightmost tabs



3. Click the **Widgets** tab to show all available widgets.
4. (Optional) Add more places to drop widgets using the **Add Rows** tab.
5. From the list, move a widget to the dashboard using a drag-and-drop operation.
6. (Optional) Click **Properties** to set a name, description, filter, or tag for your dashboard.

Figure 2: Dashboard Properties

The screenshot shows a 'Properties' configuration form for a dashboard. On the right side, there is a vertical navigation menu with three tabs: 'Add Rows', 'Widgets', and 'Properties', with 'Properties' being the active tab. The main form area contains the following sections:

- Name:** A text input field with the placeholder text 'Enter dashboard name...'.
- Description:** A text area with the placeholder text 'Enter dashboard description...' and a vertical scrollbar.
- Dashboard Filter:** A text input field with the placeholder text 'example: app http and ip 10.0.0.2'.
- Tags:** A text input field with the placeholder text 'Type new tags here' and an 'Add' button.
- Hide Empty Widgets:** A checked checkbox.

If you do not set a name one is automatically generated for you. Any **filter** to add to the dashboard affects all widgets on the dashboard. **Tags** allow you to link two or more dashboards together, which you access through drill down selections. Enable **Hide Empty Widgets** to remove from a dashboard any widget that does not have any data for the selected time period. This allows your dashboard to be more compact and focused. The widget will re-appear if there is data in a different time frame.

7. Click the accept icon ✓.

You successfully created a dashboard and populated it with one or more widgets. If data sources are configured and business groups are set, this dashboard will show data when run in the **Dashboards** page.

How to create a widget

You can create a widget to track the performance of your networks. The completed widget should be added to a dashboard.

To create a widget:

1. In the web interface, click **Configuration > Widget Library**.
2. Click the new icon **+**.

If you select a widget, this button becomes hidden. Click **Discard** to de-select the widget.

4. Save your widget by clicking the **Edit Fields** tab and clicking **Finish**.

You successfully created a widget that can be added to a dashboard.

How to add a widget to a dashboard

To add a widget to a dashboard:

1. In the web interface, click **Configuration > Widget Library**.
2. Select a dashboard from the list by clicking one.

3. If there are no empty slots in the dashboard, add more by clicking **Add Rows** and choosing an option.

An empty slot is necessary whenever adding a widget.

4. Click **Widgets** to display a list of available widgets.
5. Place a widget into an empty slot using a drag-and-drop operation.

You successfully added a widget to a dashboard. When viewing this dashboard, the widget that was added will display its metrics.

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