

SolutionPack for Aruba Wi-Fi

Release number 1.0.0.0

Summary Sheet

April, 2014

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SolutionPack for Aruba Wi-Fi

The SolutionPack for Aruba Wi-Fi provides the performance reports for the Aruba Wi-Fi controller, station, and Access Points. It collects and interprets data across multiple Aruba devices and performs resource grouping and mathematical calculations to help you evaluate performance.

This SolutionPack helps you:

- ◆ Check the number of stations connected to your controller in real-time.
- ◆ View all controllers, access points, ESSIDs, and radio through its inventory.
- ◆ Verify the access point efficiency by monitoring the transmitted packets, bandwidth, and signal-to-noise ratio, which demonstrates gains and lets you fine tune the device configuration for better results.
- ◆ Monitor the Aruba routers in real-time and pro-actively optimize the availability of your services.
- ◆ Understand the access point activity to see which AP device is being used the most, such as the peaks and busy hours of the device.

This SolutionPack is one of many provided with [Service Assurance Suite](#).

SolutionPack version

- ◆ 1.0

Watch4net version

- ◆ 6.3u1 and higher

Supported devices

- ◆ Aruba 3000 Series
- ◆ Aruba 6000 Series

Supported MIBs

- ◆ WLSX-SWITCH-MIB.mib
- ◆ RFC1213-MIB.mib

Data collection method

- ◆ SNMP collector

Main reports

- ◆ CPU Utilization for each device
- ◆ Association (average/minimum)
- ◆ Controller Summary of all devices managed in terms of number of access points, Availability %, CPU Utilization %, and access points bandwidth
- ◆ Inventory of controllers, Extended Service Set Identifications (ESSID), access points, access point groups, and users
- ◆ Performance Scorecard of association, ESSIDs, station, access point, access point groups, and radio summary
- ◆ Situations to Watch, including the Top-5 Users Currently Connected (by Access Points), the Top-5 Currently High Bandwidth (by Stations), and the Top-5 Moving Users reports

SolutionPack software updates

Obtain new or updated SolutionPack software:

- ◆ By installing the latest core software update, for example, 6.3u2. SolutionPacks distributed with core software have a 30-day free evaluation period. If you plan to use the software longer than 30 days, you must install a SolutionPack license before the trial period ends.
- ◆ By uploading a `SolutionPackCenter Update.zip` file. New SolutionPacks distributed in the zip file do not include a 30-day trial license. You must install a license file before installing the SolutionPack.

Upload a `SolutionPackCenter Update.zip` file from **Centralized Management > Packages Management > Packages Listing > Upload**.

Note

You may need to unzip the `SolutionPackCenter Update.zip` before uploading the software.

After uploading the files, you have to install the SolutionPack from **Centralized Management > SolutionPack Center**.

Ensure the core modules and SolutionPackBlocks have been updated to the latest version of your software before installing any SolutionPack. The *Watch4net Installation and Configuration Guide* provides information on how to update the software and the license.

SolutionPack licenses

Determine whether you need a SolutionPack license file by checking the feature names and expiration dates listed in **Centralized Management > License Management**. If the SolutionPack license is not listed, you must obtain one before you install the new SolutionPack.

Obtain a SolutionPack license by completing a Support Request (SR). SR forms, software downloads, and documentation are available on the EMC support website <http://support.emc.com>.

Installing the SolutionPack for Aruba Wi-Fi

Before you begin

- ◆ Determine whether you need a SolutionPack license file by checking the feature names and expiration dates listed in **Centralized Management > License Management**.
- ◆ Core modules must be up-to-date in all servers because not all module dependencies are validated during the installation or update process.

Core modules are modules that are not installed by a SolutionPack. Examples of core modules include webapps, module-manager, license-manager, java, mysql, backend, tools, and so forth. Update these core modules: **Databases, Backends, Frontends, Miscellaneous** (except Blocks). The *Watch4net Installation and Configuration Guide* provides more information.

Follow these steps to install the SolutionPack for Aruba Wi-Fi and perform Aruba device discovery.

Procedure

1. Log in to **Centralized Management**.

2. Select **SOLUTIONPACK CENTER**.
3. Select the **SolutionPack for Aruba Wi-Fi** in the **Browse and Install SolutionPacks** screen.
4. Read the summary information and click **Install**.
5. Select the **Administration Web-Service Instance** as the default and click **Next**.
6. In the **SNMP Masks** wizard, click **Install**.
7. Wait until the installation is complete for both SNMP Masks and Report and then click **OK**.
8. Under **Collecting**, click **Administration** › **Device Discovery**.
9. On the **Device Discovery** page, click **Collectors**.
10. Create a new collector by accepting all the default options.
11. Click **Device** and add the Aruba device to be discovered.
 - a. Type the IP address, the SNMP community string, and assign the collector that you previously created.
 - b. Select all Aruba capabilities to be discovered and any other capabilities.
12. Select the Aruba device that you just added and click **Approve**.
13. From the Dashboard:
 - a. Click **Import devices from all enabled device sources**.
 - b. Click **Discover capabilities from all approved devices**.
 - c. Click **Distribute all approved devices with capabilities on all enabled collectors**.
 - d. Click **Send the generated configurations on all available collectors**.

Green indicators appear on the Dashboard after successful executions of the above functions.

After you finish

After the installation is complete, select **Centralized Management** › **SolutionPack** to verify the installed SolutionPack.

Confirming report creation

After you install a SolutionPack, you can view its reports.

To view the reports:

Procedure

1. Go to **User Interface** › **Report Library**.
2. Click the SolutionPack to view its reports.

Results

It may take a minimum of three polling cycles to display all relevant information in these reports.

Troubleshooting problems with your SolutionPack

Report display problems

- ◆ [What to do if data does not appear in any reports on page 5](#)
- ◆ [What to do if data does not appear in some reports on page 5](#)
- ◆ [Searching for metrics in the database on page 6](#)
- ◆ [Running a scheduled task to import data into reports on page 6](#)
- ◆ [Troubleshooting collector errors with Collector-Manager log files on page 6](#)
- ◆ [Viewing collector errors from the command line on page 7](#)

What to do if data does not appear in any reports

Procedure

1. After the completion of at least three collection cycles, verify if data is populating into the reports.
2. On the **Device Discovery Dashboard**, verify that all icons are green.
3. To view the log files for errors, go to **Centralized Management** and click **Collecting > Collector-Manager::<instance name> > Log Files**.
4. Log in to your SQL database and verify data is being written to it. Look specifically at the `data_property`, `data_variable`, `data_property_flat`, and all cache tables:

```
select * from data_property;
select * from data_property_flat;
select * from data_variable;
select * from <cache-table-name>;
```

What to do if data does not appear in some reports

Procedure

1. Access **Edit mode** to view and copy the metric of the SolutionPack.
2. Click the SolutionPack in the report tree.
On the **Filtering and Expansion** tab, the metric expression appears below the **Filter** field.
3. Right click the metric expression and copy it to use in your search.
4. Search for the metric to verify that it is being collected.
If the metric is not returned in the search, then it is not being collected.
5. To view the log files for errors, go to **Centralized Management** and click **Collecting > Collector-Manager::<instance name> > Log Files**.
6. Log in to your SQL database and verify that data is being written to it. Look specifically at the `data_property`, `data_variable`, `data_property_flat`, and all cache tables:

```
select * from data_property;
select * from data_property_flat;
```

```
select * from data_variable;
select * from <cache-table-name>;
```

Searching for metrics in the database

You can verify that a metric is being collected and used for reporting when you search and find the metric in the database.

Procedure

1. Go to the **Administration** page.
2. Under **Modules**, click **Management of Database Modules**.
3. On the **Metric Selection** page, create the filter, type the number of results, and select the properties to display for the metric.

For example, to list up to 100 results of the SignalWait Time metric with the properties of device and IP, type `name=='SignalWaitTime'` in the **Filter** field, **100** in the **Maximum results** field, and select device and IP for the **Properties to show**.

4. Click **Query**.

A list of the metric results appears. If nothing displays, the metric is not being collected.

Running a scheduled task to import data into reports

After you push a new configuration into a collector, a scheduled task runs and populates the reports with new data. You can manually run the scheduled task to import the data more quickly.

Before you begin

Allow at least three polling cycles to pass before manually running the scheduled task.

Procedure

1. Click **Administration**.
2. Click **Centralized Management**.
3. Expand **Scheduled Tasks**.
4. Click **Database**.
5. Select the **import-properties-Default** task.
6. Click **Run Now**.
7. Confirm success in running the task in the **Last Result** and **Last Result Time** columns.

Troubleshooting collector errors with Collector-Manager log files

Review the Collector-Manager log files to troubleshoot problems with data collection.

You can also check the Collector-Manager log files from the command line, as explained in [Viewing collector errors from the command line on page 7](#).

Procedure

1. Click **Administration**.
2. Click **Centralized Management**.

3. Expand **Collecting**.
4. Click the Collector-Manager for your collector instance.
Collector-Manager::<Collector-Manager instance> - <physical_host_ID>
5. Expand **Log Files** and click the **View File** icon to review the configuration error messages.

Viewing collector errors from the command line

Procedure

- ◆ Use this path to access the log files of the SolutionPack: `/opt/APG/Collecting/Collector-Manager/Generic-SNMP/logs/collecting-0-0.log`

SolutionPack uninstallation

Uninstalling a SolutionPack

If you no longer want to view the reports of a certain SolutionPack, you can uninstall that SolutionPack from the server.

Procedure

1. Log in with administrator credentials for core software and select **Administration**.
2. Select **Centralized Management** in the Administration tree.
3. Select **SolutionPacks** in the tree.
4. Select the SolutionPack that you want to uninstall in the **Installed SolutionPacks** screen.
5. In the **Properties** area, click **Trashcan** icon for each instance of the SolutionPackBlock and click **Remove**.

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Published April, 2014

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