

Monitor Network Services

- Monitor the AAA Network Service, on page 1
- Monitor the DHCP Network Service, on page 4

Monitor the AAA Network Service

Use this procedure to view and monitor all the AAA server transactions reported by wireless controllers in your network.



Note AAA Limitations

- AAA Network Service supports wireless clients and Local mode.
- AAA Network Service does not support the following:
 - AireOS Wireless Controller
 - Flex mode or fabric mode

Before you begin

Ensure that you have installed a Cisco Catalyst 9800 Series Wireless Controller with version 17.6.1 or later and deployed with local mode AP.

Step 1Click the menu icon (\equiv) and choose Assurance > Health.
The Overall health dashboard appears.

Step 2 Choose Network Services > AAA.

The AAA dashboard appears.

Figure 1: AAA Dashboard

=	■ Cisco DNA Center					Assur	Assurance - Dashboards - Health						0 🖉 🗘	
Ove	rall	Network	Client	Application	Network S	ervices 🗸	SD-Acces	S						
S 24	Hours	~										Jul 27, 20	21 4:30 PM - Jul 28	, 2021 4:30 PM 🐵
	AAA N By def	letwork Servie fault, hourly da	ces is suppo ata is shown	rted only for Wirele up to the last hour	ess clients. . To see the mos	t recent data, p	please select th	e 3 Hours view.						×
ransactions 533	4:30p													4:30p
		6p	8	lp 10	0p	7/28	20	40	6a	Ba	10a	12p	2p	4p
														Actions V
	Insig	ht l	n the sele	ected time ran	ge, there are	e 2.43% les	s failed tran	sactions on §	90.0.4.5 serve	er compared t	o the previous	time range. 🤇)	
۵		MARY		AAA TRANSACT	TIONS									
1 se	erver	6MS -78.57 Average Latend	7% Sy	33.5k +1154	6.18% 33.5 Success	K +11836.3% ful	0 -100% Failed							

- **Step 3** Click the time range setting ((S)) at the top-left corner to specify the time range of the data that you want displayed:
 - a) From the drop-down menu, choose a time range: **3 hours**, **24 hours**, or **7 days**.
 - b) Specify the Start Date and time and the End Date and time.
 - c) Click Apply.
- **Step 4** Click the autorefresh setting ⁽²⁾ at the top-right corner to enable or disable the **Data Auto Refresh** on the supported Assurance pages in a 5-minute refresh interval.
- **Step 5** Use the timeline slider to view the information about the total successful and failed transactions of the AAA server over a period of time. The timeline slider has the following functionality:
 - You can hover your cursor over the timeline slider to view the AAA server transactions for a 5-minute window.
 - When you double-click the timeline, it brings the timeline slider to a 1-hour time period. The entire window is refreshed, providing updates for that hour.
- **Step 6** Click the Actions drop-down list below the timeline slider for the following functionality:
 - Edit Dashboard: Enables you to customize the dashboard display. See Change the Position of a Dashlet and Create a Custom Dashboard.
- **Step 7** Use the **Insight** area, below the timeline, to view the percentage of successful AAA server transactions compared with the current and previous time range.
- **Step 8** Use the AAA summary dashlet to view the following information:

AAA Summary						
ltem	Description					
AAA Summary	Displays the number of AAA server and average latency (in ms) of your network.					
AAA Transactions	Displays the percentage of total number of AAA transactions, successful transactions, and failed transactions in your network.					

Step 9 Use the AAA server dashlets for the following functionality:

Top Sites by Highest Latency

The chart displays the top sites with the highest AAA server latency, in milliseconds.

Click **View Details** to open a slide-in pane with additional details. From the slide-in pane, you can hover on a color segment in the chart to view the site with the highest AAA server latency.

You can select the data displayed as horizontal bars to filter the client table based on the top AAA servers, sites, SSIDs, and APs.

Top Sites by Transaction Failures

The chart displays the top sites with the highest AAA server transaction failures.

Click **View Details** to open a slide-in pane with additional details. From the slide-in pane, you can hover on a color segment in the chart or its corresponding legend to view the site with the most AAA server transaction failures.

You can select the data displayed as horizontal bars to filter the client table based on the top AAA servers, sites, SSIDs, and APs.

AAA Server Latency

The chart displays the average AAA latency for each AAA server. You can filter the latencies based on All, MAB, or EAP.

Click **View Details** to open a slide-in pane with additional details. From the slide-in pane, you can display the chart based on the filter selection to view the AAA server latencies.

You can select the data displayed as horizontal bars to filter the client table based on the top AAA servers, sites, SSIDs, APs, and so on.

AAA Server Transactions

The chart displays the average AAA server transaction status for each AAA server reported by wireless controllers. You can filter the status based on **All**, **Failures**, or **Successes**.

Click **View Details** to open a slide-in pane with additional details. From the slide-in pane, you can display the chart based on the filter selection to view the AAA server transactions.

You can select the data displayed as horizontal bars to filter the client table based on the top AAA servers, sites, SSIDs, APs, and so on.

Step 10 Use the AAA Servers by WLC dashlets for the following functionality:

AAA Server by WLC Dashlet					
ltem	Description				
AAA Server table	View the AAA server information in a table format that contains AAA Server IP, WLC Name, WLC Location, Transactions, Failures, Avg Latency, and so on. Click AAA Server IP to open a slide-in pane that display the AAA server Avg Latency and Transaction charts.				
	You can select the data displayed as horizontal bars to filter the client table based on the top AAA servers, sites, SSIDs, APs, and so on.				

AAA Server by WLC Dashlet					
ltem	Description				
1 Export	Click Export to export the device information to a CSV file.				
¢	Customize the data that you want displayed in the table:				
	a. From the Table Appearance tab, set the table density and striping.				
	b. From the Edit Table Columns tab, check the check boxes for the data that you want displayed in the table.				
	c. Click Apply.				

Monitor the DHCP Network Service

Use this procedure to view and monitor all the DHCP server transactions reported by wireless controllers in your network.



Note DHCP Limitations

- DHCP Network Service supports wireless clients and Local mode.
- DHCP Network Service does not support the following:
 - SD-Access fabric clients
 - AireOS Wireless Controller
 - Flex mode or fabric mode

Before you begin

Ensure that you have installed a Cisco Catalyst 9800 Series Wireless Controller with version 17.6.1 or later.

Step 1Click the menu icon (≡) and choose Assurance > Health.
The Overall health dashboard appears.Step 2Choose Network Services > DHCP.

The **DHCP** dashboard appears.

Figure 2: DHCP Dashboard

E Cisco DNA Center					Ass	Assurance - Dashboards - Health					Q 💿 👁 🗘		
Overall	Network	Client	Application	Network Service	es 🗸 SD-Acce	ISS							
S 24 Hours	\sim									Jul 27, 20	021 4:30 PM - Jul 2	8, 2021 4:30 PM 🏶	
A DHC By d	P Network Sen efault, hourly d	vices is supp ata is shown	orted only for Wirel up to the last hour.	ess clients and does n To see the most recer	ot support SDA Fabrie nt data, please select	: clients. the 3 Hours view.						×	
4:30p 114 suoppesses	6p	8	p 10	7/28	1 20	40	1 50	1 8a	1 10a	1 12p	T 2p	4:30p < >	
												Actions V	
Insi	ght I	n the sele	cted time rang	e, there are 9.3	5% more failed t	ransactions or	1 90.0.5.1 serv	ver compared	to the previou	us time range.	Ū		
DHCP S 1 Server	UMMARY 88ms +21 Average Latend	4.29% cy	DHCP TRANS 449 -33.78 Total	ACTIONS % 407 -39.97% Successful	42 Failed								

- Step 3 Click the time range setting ((S)) at the top-left corner to specify the time range of the data that you want displayed in the window:
 - a) From the drop-down menu, choose a time range: 3 hours, 24 hours, or 7 days.
 - b) Specify the **Start Date** and time and the **End Date** and time.
 - c) Click Apply.
- **Step 4** Click the autorefresh setting ⁽²⁾ at the top-right corner to enable or disable the **Data Auto Refresh** on the supported Assurance pages in a 5-minute refresh interval.
- **Step 5** Use the timeline slider to view the information about the total successful and failed transactions of the DHCP server over a period of time. The timeline slider has the following functionality:
 - You can hover your cursor over the timeline slider to view the DHCP server transactions for a 5-minute window.
 - When you double-click the timeline, it brings the timeline slider to a 1-hour time period. The entire window is refreshed, providing updates for that hour.
- **Step 6** Click the **Actions** drop-down list below the timeline slider for the following functionality:
 - Edit Dashboard: Enables you to customize the dashboard display. See Change the Position of a Dashlet and Create a Custom Dashboard.
- **Step 7** Use the **Insight** area below the timeline to view the percentage of successful DHCP server transactions compared with the current and previous time range.
- **Step 8** Use the DHCP summary dashlet to view the following information:

DHCP Summary						
ltem	Description					
DHCP Summary	Displays the count of DHCP servers and average latency (in ms) of your network.					
DHCP Transactions	Displays the percentage of total number of DHCP transactions, successful transactions, and failed transactions in your network.					

Step 9 Use the DHCP server dashlets for the following functionality:

Top Sites by Highest Latency

The chart displays the top sites with the highest DHCP server latency, in milliseconds.

Click **View Details** to open a slide-in pane with additional details. From the slide-in pane, you can hover on a color segment in the chart to view the site with highest DHCP server latency.

You can select the data displayed as horizontal bars to filter the client table based on the top DHCP servers, sites, SSIDs, and APs.

Top Sites by Transaction Failures

The chart displays the top sites with the most DHCP server transaction failures.

Click **View Details** to open a slide-in pane with additional details. From the slide-in pane, you can hover on a color segment in the chart or its corresponding legend to view the site with the most DHCP server transaction failures.

You can select the data displayed as horizontal bars to filter the client table based on the top DHCP servers, sites, SSIDs, and APs.

DHCP Server Latency

The chart displays the average DHCP latency for each DHCP server. You can filter the latencies based on **All**, **Discover-offer**, or **Request-Ack**.

Click **View Details** to open a slide-in pane with additional details. From the slide-in pane, you can display the chart based on the filter selection to view the DHCP server latencies.

You can select the data displayed as horizontal bars to filter the client table based on the top DHCP servers, sites, SSIDs, APs, and so on.

DHCP Server Transactions

The chart displays the average DHCP server transactions status for each DHCP server reported by wireless controllers. You can filter the status based on **All**, **Failures**, or **Successes**.

Click **View Details** to open a slide-in pane with additional details. From the slide-in pane, you can display the chart based on the filter selection to view the DHCP server transactions.

You can select the data displayed as horizontal bars to filter the client table based on the top DHCP servers, sites, SSIDs, APs, and so on.

Step 10 Use the DHCP Servers by WLC dashlets for the following functionality:

DHCP Server by WLC Dashlet					
ltem	Description				
DHCP Server table	View the DHCP server information in a table format that contains AAA Server IP, WLC Name, WLC Location, Transactions, Failures, Avg Latency, and so on. Click DHCP Server IP to open the slide-in pane that display the Server Avg Latency and Transaction charts.				
	You can select the data displayed as horizontal bars to filter the client table based on the top DHCP servers, sites, SSIDs, APs, and so on.				

DHCP Server by WLC Dashlet					
ltem	Description				
1 Export	Click Export to export the device information to a CSV file.				
錼	Customize the data that you want displayed in the table:				
	a. From the Table Appearance tab, set the table density and striping.				
	b. From the Edit Table Columns tab, check the check boxes for the data you want displayed in the table.				
	c. Click Apply.				