

Coverage, question filters and view filters

Summary

How to define the coverage for a question, how to filter the responses to a question at source and how to filter them in the responses view.

In this section...

Limiting coverage using a Management group - tutorial

How to use Management groups to set the coverage for a question to target a specific set of devices.

On this page:

- Coverage and filters
- Coverage
 - Real-time coverage
- Question filters
- View filters
- Comparing coverage, question filters and view filters

Coverage and filters

In [Explorer Home page, questions and responses](#) we've seen an example of Tachyon asking a question and returning some responses. The question was asked of all 6 devices and the responses from all 6 devices could be seen. However, our example environment is not representative of a real network where there may be many thousands of devices and a corresponding number of responses. In the real world it would be expected that questioners would want to perform some limiting of the number of devices questioned, the number of responses returned and the number of responses displayed.

Tachyon provides options for each of these:

- **Coverage** - limits the number of devices that are questioned
- **Question filters** - limits the responses at the Tachyon client
- **View filters** - limits the number of responses shown in a view

All of these limit the amount of data that is displayed to the user, but it's worth while making a quick comparison of the similarities and the differences to help determine when it is best to use each.

The picture opposite shows the basic similarities and differences between the three options. We'll look at each option in more detail in the following headings.

In the following examples **TCNQuestioner01** is logged in to Tachyon, they have access to the **How many of each operating system version are installed?** question that we will use to illustrate the similarities and differences between Coverage, Question filters and View filters.

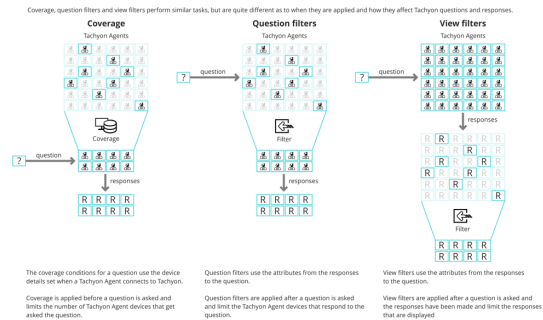
Coverage

Let's take a look at coverage first. To demonstrate the difference between filters and coverage we will set the coverage of the question to only target devices that have Windows 10 or later installed.

In the video opposite we're logged on as **TCNQuestioner01**, here are the instructions for it:

1. After typing the text **How m** in the edit field, select the **How many of each operating system version are installed?** question from the list of matching questions.
2. Note that the **Approximate target** field shows that there are **12 connected out of 12 devices**. This is because in our example environment there are only 12 Tachyon client devices in total and all of them are connected. In a real network you are liable to have intermittently connected devices and the connected number shown will vary accordingly.
3. After the question is loaded click on the **Edit** link in the parameters section beneath the question text. Doing this expands the **Parameters** rollout.
4. On the **Parameters** rollout click the **Coverage** heading to see the coverage parameters.
5. Click the **Operating system** heading to expand the controls for setting a coverage using the operating system details
6. The **Type** parameter lets you select the device's operating system from a list of supported OS. Select **Windows**.
7. The **Version** parameter lets you define a numeric comparison for the number you type in the edit field. Select the **>=** operator

Coverage and filters



and then type **10** in the edit field. This will check for all Operating Systems of version 10 or later.

8. Click the **Set** link in the bottom-left of the expanded **Operating system** heading, which adds the **OsVer >= 10** and **OSType = Windows** coverage parameters to the question details.
9. Now click the **Ask this question** button. The question will only be asked of the devices whose device parameters match the coverage just set.
10. The **Responses** page for the question displays the selected **Coverage** parameters in the question header.
11. Once all the responses have been received you can see in the video that there are two rows where the **Os Version Text** is **Windows 10 Enterprise** and **Windows 10 Pro** respectively and the **Count** totals **2**.

Real-time coverage

Tachyon does not just work on the basis of the Tachyon client devices that are currently, or have previously, connected to Tachyon. It is also open to existing information changing and to new, previously unconnected, Tachyon client devices that come online while a question is active. This means that the coverage information in the question header, where it shows the percentage of answers received out of the total number of devices included in the coverage, could change as Tachyon client devices change their device properties registered with Tachyon or new Tachyon client devices come online.

In our coverage example the responses could change if a Tachyon client device finishes a migration to a Windows 10 operating system or a new Tachyon client device with the Windows 10 operating system connects while the question is still active. In this case the number of devices in the coverage would change but the percentage could stay at 100% if all of the new devices covered have also sent responses.

Question filters

The second option is to apply a filter at the point the question is being framed. This does not affect which Tachyon clients get asked the question. The question filter, which is constructed from the attributes of the question response, controls which of the Tachyon clients actually send their responses.

Question filters are set by editing the question parameters, once a question has been selected, you expand the **Filter results** heading in the **Parameters** rollout.

In the video opposite we're logged on as **TCNQuestioner01**, here are the instructions for it:

1. After typing the text **How many of each operating system version are installed?** question from the list of matching questions.
2. After the question is loaded, click on the **Edit** link in the parameters section beneath the question text. Doing this expands the **Parameters** rollout.
3. On the Parameters rollout, click the **Coverage** heading to see the coverage parameters.
4. Click on the **Filter results** heading to expand that section.
5. Clicking on the **Filter results where:** field displays the question attribute list, that is the list of attributes that are defined as part of the question.
6. Select **OSType** from the list and it gets added to the field and a second list is displayed containing the operators that are relevant to the attribute type, in this case a string.
7. Select the **contains** operator and that gets added to the field. Now the rest of the field becomes an edit field.
8. Type in **Windows** to complete the filter and then click the **Set** link in the bottom-right of the expanded **Filter results** heading to add the filter to the **Filter results** for the question.
9. Now start the process of building the second part of the filter. This time, click in the field and select **OSVersionText**.
10. Select the **contains** operator.
11. Type **10** into the edit field and finally click the **Set** link to add the second filter to the **Filter results** for the question.
12. Once the filters have been added, click on **Ask this question**.
13. The **Responses** page for the question displays the selected **Filter results** parameters in the question header.
14. The responses come back from the devices and the results look similar to the coverage example.

View filters

The last option is to apply a filter at the point of viewing the responses to the question. This does not affect which Tachyon client devices get asked the question, nor does it affect which Tachyon client devices return responses.

View filters are set on the **Responses** page for the individual instruction, once a question has been selected and asked, you then expand the **Filter results** panel just above the responses table.

In the video opposite we're logged on as **TCNQuestioner01**, here are the instructions to follow it:

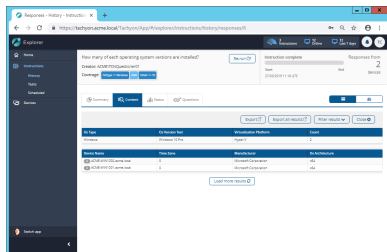
1. After typing the text **How m** in the edit field, select the **How many of each operating system version are installed?** question from the list of matching questions.
2. This time go straight to clicking on **Ask this question**.
3. In moments, the **Responses** page for the question shows that all the devices have responded.
4. Click on the **Filter results** button to expand the filter results panel.
5. Type **Windows** into the **OS Type** field and **10** into the **OS Version Text** field then click the **Search** button.
6. Now the responses from all the connected devices are filtered to just the Windows 10 devices.

Comparing coverage, question filters and view filters

Here we compare the three sets of responses to the same question, but set with different coverage, question filters and view filters.

Coverage

Here are the results of running a question with coverage set.

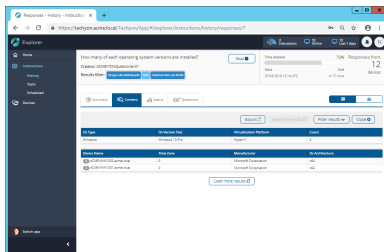


The following points summarize coverage:

- Lets you constrain a question so that it only gets asked of particular Tachyon client devices
- Uses the device details registered with Tachyon by each Tachyon client device
- Is applied at the Tachyon Server before the question is asked
- Remains active for the duration of the question, so Tachyon client devices that change their device details registered with Tachyon may subsequently be included in the question's coverage - that may include new Tachyon client devices that haven't previously connected.

Question filter

Here are the results of running a question with a question filter set.

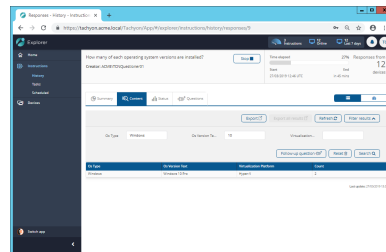


The following points summarize a question filter:

- Lets you constrain a question so that responses are only made by particular Tachyon client devices
- Uses the question attributes. The question is run on the Tachyon client and if the response satisfies the question filter it is sent to Tachyon
- Is applied at the Tachyon client after the question is asked but before the response is sent.

View filter

Here are the results of running a question with a view filter set.



The following points summarize a view filter:

- Lets you constrain the responses for a question so that only the ones that pass the filter are displayed
- Uses the data in the columns for the responses to a particular question
- Is applied in the Tachyon Explorer in the **Responses** view after the responses have been sent to Tachyon Server and are being viewed.