Nexthink V6.25

Library Packs Configuration

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Configuration Manuals

Overview

Find here the configuration manuals of the packs in the Nexthink Library that require nontrivial steps to get them up and running.

The configuration manuals of the different library packs are available in this same **Library Packs Configuration** section, starting from the minimum version of the product that is compatible with each pack.

Related references

- Nexthink Library

Installing a New Version of a Library Pack

When a Library Pack is updated with more features and bug fixes, the initial release (e.g. 1.X) is superseded by the new (e.g. V2.X). This is indicated in the first Portal dashboard in the pack, where in the slide-out help on the right you will see the current version of the pack you are using:

Use this method to understand which version of the pack you are using.

Installing a Clean Copy of a library pack

If you are in fact not upgrading, but installing the new Library Pack for the first time, simply download it from the Nexthink Library and select Install, all new content will be installed in the various areas of the Finder and Portal. The

"Conflict" dialog could be displayed as there may be Categories shared with another pack. Refer to the Conflict Resolution documentation for further help.

Upgrading to the latest version of an existing library pack

If you have a Library Pack installed and are looking to install the next version of it, there are two possible ways.

Removing the existing library pack and install the new version

The first, which is the most straightforward, is to fully remove the existing library pack (Dashboards, Metrics, Investigations, Categories, Campaigns, Services) and then do a clean install of the new one. In this scenario be aware you will lose any customization. In particular keep in mind the configuration you might have put into Categories and Metrics. You will also lose historical data in the Portal for this pack as you are doing a complete remove / replace. If this is not of critical importance to you, then proceed in this fashion.

Post removal, you would proceed as normal with the pack installation and configuration.

Migrating from a version to the next

Should you wish to upgrade from a version to the next without removing the existing library pack, it is a slightly more involved process. The advantage of this method is you will retain your historical data in the Portal.

When doing an import with the library pack already present, a number of items may report conflict in Finder. Please see the Conflict Resolution documentation for instructions on how to manage the conflict resolution process.

Should you be upgrading, as per normal Nexthink behavior, the Portal will install new dashboards with a numerical denominator next to them to indicate they are the new ones. Align any dashboard customization's as you wish using normal

Portal editing options such as copying and pasting widgets and dashboards and then remove the extra dashboard copies you no longer need.

Digital Employee Experience

Reduce logon duration

You can adjust the threshold of the logon and extended logon duration to your need. By default, thresholds are the same than used in the DEX score.

To change thresholds, modify the following 2 metrics:

1. **Reduce logon duration- Devices with poor logon duration**
2. **Reduce logon duration- Devices with poor extended logon duration**

Group Policy Management

To use this library pack the following remote action need to be be executed on all devices.

Remote Action: Get Gpo Startup Impact

This Remote Action is found within the Nexthink Library > On Demand area:

Recommendation is to run this remote action every week. It is possible to use this investigation to execute it on all Windows workstations: **Group Policy Management - All Windows computers**

Application Auto-Start Impact

To use this library pack the following remote actions need to be be executed on all devices.

Remote Action: Get Startup Impact

This Remote Action collect application startup impact measured by Windows 10. Can be found within the Nexthink Library > On Demand area:

Recommendation is to run this remote action every week because startup impact is evaluated by operating system after a complete boot.

The following investigation is ready to use to execute the Remote Action on all Windows 10 workstations: **Application Auto-Start Impact - All Windows 10 computers**

Remote Action: Disable application from Startup menu

This Remote Action allow to disable a list of application or all application not listed in the white list. Can be found within the Nexthink Library > Remediation area:

Application to disable or keep can be copied from **Applications output** of **Get Startup Impact** Remote Action.

Recommendation is to run this remote action every day.

Remote Employee Experience

Remote Worker Experience

Overview

The Remote Working Experience Pack (Version 3.1.0.0) enables you to manage the experience of your remote workforce. Whether working remotely out of choice or necessity, the digital experience of the remote worker is vital as their isolation makes them completely dependent on their digital devices.

The pack gives you a readiness-assessment of your infrastructure to ensure that your employees are able to successfully stay productive and collaborate with their colleagues, whether remotely or in the office.

The pack will allow IT teams to monitor, manage and report on their employees' digital experience and by taking both technical and sentiment metrics into account, it will provide a complete employee-centric infrastructure visibility. It monitors the usage of the remote connection so that the network traffic can be optimized and forewarns of impending user experience issues such as passwords soon to expire.

In particular the pack focuses on the device readiness and configuration and the success of Microsoft Teams, Skype for Business and Zoom. (If your organization does not use these tools, then the appropriate dashboards and metrics can be removed).

The pack comes with Sentiment campaigns for both IT Topics, such as Service Outage and IT Satisfaction along with HR-centric campaigns on items such as Employee Well-being.

With the latest release of the pack (V3.1.0.0) you can now also detect the Wifi signal strength for the remote devices and a self-help campaign can assist the employee in getting a better Wifi reception.

Change log

The Remote Worker Experience pack is currently being regularly updated.

V3.1.0.0

In version 3.1.0.0 of the Remote Worker Experience pack the following changes should be noted:

1. Wifi Experience is now measured. The dashboard uses both a Remote Action and a Campaign to populate the Wifi data so please ensure if you want to measure this you have targeted and enabled the Remote Action and Campaign accordingly. See below for details on these steps.
2. Minor bugfixes ? minor changes to the text on 2 KPI's.

V3.0.0.0

In version 3.0.0.0 of the Remote Worker Experience pack the following changes should be noted:

1. There is a new category, ?Unwanted Domains? which lists domains or categories of website that it is preferred people do not visit, not necessarily because they are banned, but perhaps to save bandwidth. This category can be populated with tagging conditions that you wish, such as wildcard site names, domain categories and so forth.
2. New Dashboards exist for monitoring application metrics and user experience technical data such as response times. There are a number of TopX widgets allowing you to address any high consumption, unstable or slow responding items.
3. Employee Wellness Campaign. This Engage Campaign targets Remote Workers with a wellness questionnaire to understand how they are feeling when working remotely. It is a non-IT related campaign and will give an indication of employee satisfaction outside purely the IT spectrum.
4. In the existing Satisfaction campaign, there are 2 additional choices to the question "Which of the following issues do you experience when working remotely?": VPN-related issues and Slow or unstable internet connection.

V2.0.0.0

Please note that in version 2.0.0.0 the following changes are important:

1. The Application Category ?Home Office ? Applications' has been removed. This category is superseded by categories for both packages and for executables for the covered applications. Please see below for the configuration of these packages. If you are upgrading from the initial release of this pack, please re-populate the new categories with any additional packages or executables you wish to cover (details further

down).
2. MacOS support is added where possible. Note that not all the dashboards fully support the range of data collected with regards MacOS so take note that some dashboards may be partially Mac and Windows and some widgets just Windows.
3. Zoom is added. As with the previous version, only use what you need ? if you wish to remove any of the Zoom, Skype for Business, Teams or the various Firewall or VPN apps you are more than welcome to do so. Details on this procedure are below.
4. Finally, as with the earlier pack, take particular note that the automatic detection using the IP address uses a feature (last local IP) that is only available since version 6.24 of Nexthink and only when the collector is using TCP as its communication channel. If your environment is below this level, or still uses UDP, then please uses the manual categorization of the User class, to identify your remote employees.

Upgrade process

When upgrading a Nexthink Library Pack from one version to the next, particular care should be taken. Follow this link to read about the upgrade process from a version of a Library Pack to the next one.

Once you have read and understood this process, please return here for specific instructions regarding this pack.

Categories

If you have customized the V1.x categories, in particular the Remote Worker vs Office Worker Device category, then you may well want to keep these customizations so leave the menu option to skip during the import. This category is still used extensively in the pack.

The Home Office ? Applications category is no longer used in V2.x and above, replaced with a set of Package and Executable categories (see configuration guide). Therefore, although there will be no conflict here, this category can be removed post upgrade. If you have customized the entries in this category be sure to put the equivalent data in the relevant Package and Executable categories.

Metrics, Campaigns, Investigations, Remote Actions, Services

When upgrading from V2.x, there are a large number of metrics that will conflict mainly due to the inclusion of MacOS in the criteria, plus the use of the new categories (mainly Readiness Assessment and Understanding Remote Landscape). You must choose Replace as the menu option for all content which will align the criteria and configuration to the new pack and use the new categories where relevant. Any customizations made will need to be re-entered.

Post V1.x Upgrade

If you have upgraded from V1.x then there are some objects which will remain in place after the upgrade which are no longer needed, these can safely be removed:

Type	Name	Reason
Module	Remote Worker Experience	Replaced by the new module
Module	Remote Worker Services	Replaced by the new module
Category	Home Office ? Applications	Replaced by new categories
Metric	Remote Worker Experience - Readiness Assessment - ALL Ready Users	Obsolete
Metric	Remote Worker Experience - Readiness Assessment - ALL Not Ready Users	Obsolete
Metric	Remote Worker Experience - Sentiment - Positive points	Obsolete
Metric	Remote Worker Experience - Sentiment - Users enjoying work remotely	Obsolete
Metric	Remote Worker Experience - Sentiment - Users not enjoying work remotely	Obsolete

Configuration - Categories and Metrics

The pack requires some level of configuration so that it can correctly identify remote workers. These configuration steps should be set to the values relevant to your organization before using the pack so that the results are accurate.

Because of the multiple possibilities in the configuration of Remote Workers it is also possible to amend metrics, this will also be covered.

User category "Remote Worker vs Office Worker"

Use this category if you wish to identify users as remote workers by assigning this manual category. To use, simply create an investigation of all users you wish to categorize as remote and set the keyword so that they are categorized as the "Remotely Connected Worker".

Device category "Remote Worker vs Office Worker Device"

This category will tag devices as remote based on their IP address. It works on the principle that ranges for workers that are on site ("Office Based Worker") is defined and automatically detected, with any other address considered being remote from the environment and so defining the worker as a "Remotely Connected Worker".

To successfully use this category, please define the ranges that your organization uses when employees are present at the office, i.e. not remote. It is important that the "Last Local IP Address" subnet ranges match the IP configuration for your business.

So, for example, if you use a 10.x.y.z address for your internal addressing when in the Office, ensure this is set in this category. It is pre-populated with 10.x.y.z and 172.16.y.z as these are commonly used for internal addressing when at work. TIP: you can also use "not in subnetwork" to exclude particular ranges that might be within a larger range.

Please note that the automatic detection using the IP address uses a feature (last local IP) that is only available since version 6.24 of Nexthink and only when the collector is using TCP as its communication channel. If your environment is below this level, or still uses UDP, then please uses the manual categorization of the User class, to identify your remote employees.

Finally note that there is no fixed reason that this method has to be used. If you wish to remove the dynamic criteria and simply statically assign a portion of your devices with this category, this will also work.

Home Office - Applications

This category no longer exists and has been removed in V2.x and above. This note is kept simply for understanding of what has happened.

This category defines which applications should be present on a remote working device in terms of a Firewall client, VPN or Collaboration toolset before it is considered compliant and ready for remote working. It is entirely possible to customize these entries to match the requirements of your organization. The metrics in the pack use these categories for their criteria and along with the category configuration feel free to also modify metric criteria within the "Readiness Assessment" folder if, for example, there is no VPN client check needed.

Remote Worker Readiness

This category should be configured to describe the types of devices that remote workers will be using, using whatever criteria you wish. During the execution of the pack, in the readiness assessment dashboards, these criteria are used so that only the readiness of devices which match the criteria of remote worker devices are reported on.

Collaboration Packages, Firewall / AV / Other Packages, VPN Packages

These three categories define packages that you wish to look for in the pack. The Packages should be present on a remote working before it is considered compliant and ready for remote working. It is entirely possible to customize these entries to match the requirements of your organization, the default values hold commonly used applications.

Collaboration Executables, Firewall / AV / Other Executables, VPN Executables

These three categories hold the equivalent executables for the earlier Package based categories. This is needed because although we can look for installations with categories, if we wish to list version dispersions and so forth we need to go to the executable level. Once again, full customization is possible, change the entries as you wish to match any particular executables you wish to track.

Unwanted Domains

This optional category holds any domain or domain category that you either simply want to track or do not want users to be using. The associated metrics do not stop users visiting these domains, Nexthink cannot do this, however it reports on the data volumes going to them.

Campaigns

The pack also contains five campaigns, which can be used as wished.

Satisfaction campaign

This Campaign is intended for continuous feedback on Remote Working experience. Examine the Campaign details in terms of the title and description amending as wished. When ready, publish the Campaign. It is targeted at the Investigation "Remote Worker Experience - Users working from home" so when published this Investigation will be evaluated and continue to be so every 10 minutes following. The Campaign is configured so that recipient will get the Campaign once every month.

Information Campaign

This Campaign is intended to update remote workers (or any targeted users) with informational updates of any sort. This could be a news update regarding a hot topic within the company, a reminder on some best practices, it really is anything you wish to put into it. When ready, publish the Campaign. It is targeted at the Investigation "Remote Worker Experience - Safety measures audience" so when published this Investigation will be evaluated and continue to be so every 10 minutes following.

Service Outage

This campaign is particularly aimed at quickly informing people of service outages or degradations. When connected remotely it can be frustrating if services go offline, so this campaign allows the quick delivery of service status messages. The pack includes a campaign targeted for Microsoft Teams, however this can be modified to cover any service name.

Well-being Campaign

This campaign is aimed at the well-being of employees from a non-IT perspective. While working remotely it is important not just to track the technical side of the employee experience but also their overall happiness and satisfaction with their remote working experience. The campaign is targeted at Remote Workers by default.

Get Wi-Fi Signal Strength

This campaign is launched when the Remote Action "Get Wifi Signal Strength" is launched against a remote device. The WiFi network at the remote destination is measured and should it be below a certain threshold (one of the input parameters) then it will launch this Campaign, which is self help for the user. We encourage you to modify the Campaign with any self help tips that you would like to bring in for your Organization. The Campaign also asks the User whether the tips were useful so it brings an understanding as to whether the tips being offered are of use.

Metric Modification

The metrics to track software installation and uninstallation use a particular mechanism. Within the Readiness assessment branch of the metrics you will see that the criteria are looking for the presence of either a single package or multiple packages. If it's a single package, you can simply change the package name in the relevant category and the metric will look for the new name. if you wish to add more criteria, for example say you wish to look for the presence of five packages, the key is to add the additional criteria using the existing logic of "Package...<Category>...is...<Item>" but note that in the "and" section further down, the total number of packages you are looking for should be incremented: If you are looking for five packages, this should be updated to five and so on.

This ultimately means full flexibility: for any of the categories in the pack you can have as many packages or executables you want and you can amend the metric criteria accordingly if you wish to search for more packages or executables being present before considering the device compliant.

GSuite

GSuite: Health

Pre-Requisites

This pack has no mandatory pre-requisites and can be run directly without configuration. However optional configuration may be necessary as described below.

Defining Additional Domains

Configure Category '**GSuite Web Apps**' if you have your corporate domain or domains designated as GSuite domains. So for example if you have mail.domain.com set up as an alias for GMail (mail.google.com) then you can optionally add these domains to the Category so that both domains will appear in any results concerning metrics relying on this category.

GSuite: Services

Overview

This pack is made up of a number of Nexthink Service definitions covering all the main GSuite Workloads. There is no mandatory configuration, however optional configuration can be made:

Configure Additional Domains

If your Organization has configured your corporate Domain(s) to be managed by GSuite, then you can add these domains to the Category '**GSuite web apps**' to indicate any additional Domains as required for the various GSuite Services.

Configure Alerting

Should alerting be wanted when a threshold is breached for a particular service this can be set up for each service within the pack. There are a number of options around how services can be configured within Nexthink so please follow these instructions for each Service that you wish to configure this for.

GSuite: Sentiment

Pre-Requisites

This pack uses Nexthink Engage campaigns. As such some configuration is required to ensure the campaigns are targeted suitably. Each Campaign is discussed below.

GSuite - New Service Arriving

Configure Campaign **GSuite - New Service Arriving** if you have a new or Service (or just if you want to inform users of change to one of the existing GSuite Services). There is not specific set of users targeted with this Campaign, it is your choice.

First you must edit the Campaign and insert in the description exactly what you would like to say to users, including any hyperlinks you might need. Once this is done select '**Publish'** from the menu. Because it is a manually targeted Campaign, next go to the Investigations area in the Finder and make a user based Investigation targeting whichever users you wish to receive the Campaign. As an example we have included an Investigation '**GSuite - Users using Google Chrome'** which can be used if wished. Once you have the results, i.e. your target user set, right click and from the context menu and select the campaign to deliver it. *Make sure you get the list of users correct so as to not deliver to users not expecting the Campaign*.

Note that once published you can edit the description and content of the Campaign to amend it for new services being delivered.

GSuite - Service Outage / Service Resolved

Configure this Campaign when there is a planned or unplanned Service Outage. The process is exactly as described above for the '**New Service Arriving'** Campaign, however with two Campaigns, both the announcement and the resolution campaigns, ensure that you send the right campaign to the right users for when the service outage occurs and when it is resolved.

GSuite - Production Feedback

This campaign is a general feedback Campaign for users of the GSuite service. It indicates overall satisfaction with the Service. As above, the Campaign should be manually targeted to a group of Employees if to be delivered one time only. This campaign could also be run regularly to Employees to continually understand the Sentiment of users and any happiness or unhappiness with the Service.

If you wish to change the Campaign to be a regularly running campaign it will need to be altered to be targeted with a suitable investigation for your target users. For more information on this process please see the relevent documentation

GSuite - Audio or Video Call Quality Satisfaction

Unlike the previous Campaigns, this Campaign is intended for continuous feedback on G Suite call quality and Video quality. Examine the Campaign details in terms of the title and description amending as wished. When ready, publish the Campaign. It is targeted at the Investigation '**GSuite users with audio or video calls in the last hour'** so when published this Investigation will be evaluated and continue to be so every 10 minutes following. The Campaign is configured so that no recipient will get the Campaign more than once every six months.

This configuration is flexible. If you wish to change it to be manually targeted you are free to do so.

GSuite: Advanced health

GSuite: Advanced Health

Pre-Requisites

This pack does not have mandatory pre-requisites but does use Remote Actions that must be configured. Upon import the 'Test Chrome Plugin Compliance', 'Get Browser Tabs' and 'Get Chrome Plugins' will be created.

Chrome Compliance

This pack concentrates on Google Chrome

It starts with how much of your landscape does and does not have Chrome installed for a high level view on your Chrome Deployment. Following this, there is information on the success of the "Test Chrome Plugins Compliance" Remote Action, which should be run on a regular basis. This Remote Action will check whether given Plugin's are present and at what version. Should this check be failing, it should be investigated on these devices. Make sure that this Remote Action is configured to run at a suitable frequency, ideally daily and that in the input parameters you have configured which plugins are to be tested and whether to go to the version level or simply test for presence.
Next the dashboard will show how many devices that successfully ran the check, returned compliant or not compliant, i.e. a successful technical execution, now looking at the results. Should anything be non-compliant there is need to look at the Remote Action output in the Finder to find out why they were not compliant.
After this, there is Individual Plugin Compliance Failure, showing devices that have successfully run the Remote Action, returned not compliant and now showing which plugin had returned non compliant. Any devices should be investigated.
In all the above scenarios, the dashboard and metrics are using basic checks on the base plugins (gmail, docs, sheets) however the RA can be very granular, it can look for any plugin at any version and whether it is enabled or disabled. Should you wish to customize this dashboard or the metrics behind to suit your organization then the criteria's can be customized as far as is needed.
Should more than one Compliance profile exist, then it is possible to duplicate the remote action and give a second set of criteria in the duplicated Remote Action.

Defining Additional Metrics

This Pack is very dependent on individual environments. The metrics that are part of the dashboard are meant only as a starting point for configuration, looking at the most basic options.
Should your organization have a different set of plugin's or version levels then feel free to create new metrics as described above with alternative criteria from the output of the Remote Action.

Support

Support: Level 1

Level 1: Checklist Advanced

For added security, the library pack by default imports remote actions with manual execution disabled.

To enable manual executions edit each remote action, and check "Allow manual triggering of the remote action on these devices". Optionally, select a category & keyword to limit the execution on a set of devices only.

Office 365 Health

Office 365 Health: Overview

Office 365 Health: Overview

Pre-Requisites

There are no prerequisites

Defining Tenant Names

It is necessary to amend two categories, SharePoint and OneDrive, so that the URL's correctly point to the relevent URL's for your Organization.

1. In Category folder **Office 365 Health - web apps** configure Category **Sharepoint** and **OneDrive** to give the name of your Office 365 Tenant(s).
2. The "COMPANY_NAME" should be replaced with your tenant name (normally the same or related to your company) so for example **Nexthink.sharepoint.com** or **Nexthink-my.sharepoint.com**.
3. Additional autotagging conditions can be added if you have multiple tenants.

Office 365 Health: Services

Pre-Requisites

There are no prerequisites

Mandatory Configuration

There is no mandatory configuration to be performed in this Module. If any of the Services are not desired to be monitored they can be removed in the normal way by editing the dashboard and removing the widget.

By default all services will be monitored.

Optional Configuration

Should alerting be wanted when a threshold is breached for a particular service this can be set up for each service within the pack. There are a number of options around how services can be configured within Nexthink so please follow the instructions found here for each Service that you wish to configure this for.

Office 365 OneDrive

OneDrive Summary

Overview

OneDrive is Microsoft's Cloud based file storage solution. Offering large amounts of storage securely, it is popular and growing amongst businesses of all sizes.

Nexthink's OneDrive Solution Packs cover all aspects of a OneDrive deployment, from Migration to Production and on into the Sustain.

The four packs cover different areas of the Product:

1. Operations - This covers the day to day Production run of OneDrive on the client devices. It requires the core Nexthink Analytics module.

2. Advanced Health - This enhances the Operations solution with additional insights into OneDrive gained from deeper analysis using the Act module. It also allows for various proactive actions to be taken through the Remote Actions functionality.

3. Migration - Many organizations are thinking about, or commencing, a migration to OneDrive. This module will take them through this migration walking from the initial readiness through to the Production completion.

4. Sentiment - This Module uses the Engage functionality to add Sentiment analysis to the solution so that the Technical Metrics can be correlated to genuine user feeling. It also enable Out-of-the-Box Service messages for topics such as OneDrive service degredations.

OneDrive Operations

Overview

The Operations pack covers the day to day running of OneDrive across Production.

Overall Installation and Configuration

The installation of the pack depends on the existing configuration. If you have already installed and are using the existing legacy Nexthink OneDrive pack then the recommended approach is to remove this pack and then install the new 'OneDrive - Operations' Pack. The new Pack will then install silently without conflict.

Should you wish to keep the existing OneDrive Pack then there are some metrics that are common to the two Packs. Therefore you will be prompted on install of the new 'OneDrive - Operations' Pack whether to merge some metrics which are common to the pack. To work successfully with the new Pack please choose "Replace" rather than "Skip" to ensure the best functionality of the new Pack.

There is no mandatory configuration for the pack once installed, it will work as soon as deployed, however there are some optional steps that can be taken if wished.

Firstly, there is a Category "OneDrive Process". This contains both the Windows and Mac versions of the OneDrive process. If there are no Mac (or no Windows) in your environment, then the appropriate classification within the category can be removed.

There is also the categories "Shadow Storage" for which has DropBox and Google Drive File Stream entries for the processes and also the Domain destinations. These can be removed if wished or similarly if you have other non compliant cloud storage provides you would like to add, they can be included by adding another classification within the categories.

Mandatory configuration

- No mandatory configuration is required.
- Optional Configuration as described above may be performed.

OneDrive Advanced Health

This article or section is in the process of an expansion or major restructuring.

OneDrive Migration

Overview

OneDrive is Microsoft's Cloud based file storage solution. Offering large amounts of storage securely, it is popular and growing amongst businesses of all sizes. Nexthink's OneDrive Solution Packs cover all aspects of a OneDrive deployment, from Migration to Production and on into the Sustain. The Migration pack concerns the transformation of a traditional home folder corporate setup to one that uses OneDrive for Home Folder Storage.

This Library Pack does not perform the migration execution, as there are multiple ways in which an organization will move files into OneDrive, it's aim is to enable smooth management of this process. However, the actual technical file transfer into OneDrive may take place. The idea behind the pack is that users will be split into Waves. These waves will then be migrated to OneDrive sequentially.

Configuration

There are several important key concepts in this Library Pack to be understood and configured.

Legacy Home Folder location

The pack uses the idea that the Personal folders to be moved to OneDrive must exist somewhere on the corporate landscape. This can be anywhere from the local device hard drive, to a server-based UNC Share. As part of the Pre-Migration confirmation that an Employee is ready to be migrated, the Library Pack will need to be configured with the location of the share that is used for an Employee to reach their personal files. This can also be expressed as environment variables, for example **"\\Server1\Home\%Username%"** or even **"%HomeDrive%%HomePath%?** which enables the pack to work for multiple users with a single configuration.

Pre-Migration Pre-Requisites

The Library Pack will perform a number of checks on both the technical data of the users home directory, finding any files which cannot be migrated to OneDrive as well as Sentiment based checks using Campaigns within the pack, which will highlight users who are requesting more help.

Home Directory Servers

In the event that the company uses traditional file servers to host the existing Home Folders for users, then these should be populated as part of the category Home Folder Servers and the pack will then highlight the file access traffic going to and from these servers from the users devices. This is important in the planning of your OneDrive migration. You must make sure that you understand how much traffic is being used for the existing home drive solution so that you can then plan for this traffic becoming internet facing traffic when moving to OneDrive.

OneDrive Deployment Wave

The category 'OneDrive Deployment Wave' should be used to move individuals into different batches for migration. Ideally several batches can exist moving in a train-like fashion, with batches executing as time allows during the migration. The pack comes with a dashboard for one wave, but more can be created as required along with the prerequisite metrics for the new wave(s).

The difference between not being migrated and being migrated is handled via Categories in this Library Pack. Initially all Employees should be given the category "Unassigned to Wave" meaning they still need to be assigned. Employees should be assigned to either being Excluded, or one of the Migration waves as part of setup. During migrations, once a user has been either moved to OneDrive or they failed to move, their category should be set to either "Migrated" or "Failed" depending on the outcome. This is then reflected in the dashboards of the pack.

Remote Action Configuration

There are two remote actions that are included in this Library Pack. Both remote actions are used by several metrics to collect information relevant to the migration process. Information such as file sizes, number of directories and sub-directories on a local device hard drive or a server-based UNC. One of the remote actions also checks for invalid file paths and invalid file name syntax. For these remote actions to function, they need to be manually provided a path to the local or UNC drive. This is done by going into the finder, finding the remote actions, and editing the **InputPath** parameters as desired. Listed below are remote actions that **must** be downloaded and installed in your finder for this Library Pack to work correctly:

Get User Folder Size

The 'Get User Folder Size' remote action is included in the Windows Information Library Pack.

Test OneDrive Files Path and Syntax

The 'Test OneDrive Files Path and Syntax' remote action is included in the OneDrive Library Pack

Metrics configuration

The metrics included in this Library Pack were built with the assumption that they will be customized to fit the digital environment in which they will operate. Generally, a fair amount of them make use of the two aforementioned remote actions, especially the Sentiment metrics. Most of them have extensive interaction with the OneDrive Migration Sentiment, OneDrive Deployment Wave and Home Folder Sizes categories included by default in this Library Pack.

Engage Campaigns

There are three Campaigns of importance: Training, Pre-Migration and Post-Migration in the pack. These campaigns are configured to manually target users by default but can be changed to make use of the utility of investigations or remote actions.

Training

This Campaign can be targeted at any users who require training either before or after migration, ideally this should be all Employees. The Campaign should be customized to your Organizations needs and requirements and then delivered. As part of this Campaign the Employee is also asked whether they require more training and if they respond positively this is visible in the Migration dashboards.

Pre-Migration

this Campaign looks at the overall satisfaction with the existing Home Folder solution, whatever it may be. It is important to take this Sentiment before a migration to OneDrive so that post-migration, the same Campaign can be run, and it can be determined whether the Employee views OneDrive as an improvement. If they don't then this should be discussed and analyzed within the company, as a migration to a new service like OneDrive should be an enhancement not a detriment to the user. Users who have been migrated should be put into the category of 'OneDrive Migration Sentiment' by attaching the 'Post-Migration Sentiment' tag to them.

Post-Migration

Similar to the Pre-Migration Campaign, this Campaign's purpose is to determine how satisfied the Employee is with their new OneDrive solution.

It should be taken following successful migration. This would then allow for administrators to know who views the new solution as an enhancement and who views it as a detriment. Users who have been migrated should be put into the category of 'OneDrive Migration Sentiment' by attaching the 'Post-Migration Sentiment' tag to them.

OneDrive Sentiment

This article or section is in the process of an expansion or major restructuring.

Office 365 Teams

Teams Overall Configuration

Create Service

It is strongly advisable to create a Nexthink Service for the Teams Service which provides a lot of insight out of the box of any given process. Note that this only needs to be done once, whereas there are many Teams Solution Packs, so please follow these instructions only once, not once for each Pack. To configure this, go to the ?Services? and configure a new service as you would for any other Nexthink Service definition:

Note the type is HTTP and TLS web requests. This will then, as per normal, create the Dashboard for this automatically within the portal which you can then use.

Follow the evolution of the service in Portal.

Configure categories

- When deploying Teams there are many scenarios where it will be rolled out to an Early Adopter group before being rolled out to the main Production users. In this scenario there is a Nexthink Category which allows you to flag these users as Early Adopters and there is a dashboard relating to this which enables you to look at the Early Adopter statistics compared to the Production users.
- This pack has a single Category, Teams User Deployment Ring:

- This category defines all users with the Keyword Production unless they are manually categorized as having a different deployment ring, which can be Early Adopter or other Pilot rings.
- The metrics and dashboards as delivered use only the Production or Early Adopter Keywords. If other deployment Rings are needed the metrics can be duplicated and amended accordingly.
- If you are wanting to pilot Teams to a set of users then please set the Keyword on them via the Finder to be ?Early Adopter?:

Tip: If Teams is to be deployed in stages across the Production landscape it is also possible to move the order of the auto tagging so that users are defined as ?uncategorized? and not Early Adopter or Production, meaning they will be excluded from any dashboards until they are then classified as such. This allows for a model where Teams is being slowly deployed across the organization and users can be classified as Teams Production users as the Production deployment takes place.

- Once the configuration is in place, then the Dashboards for Overview and Performance will populate with the metrics for the Users that are classified as Early Adopters.

- If you change the category (new keywords, change of condition, etc.) and import a new Pack referring to it, the ?Finder conflict? dialog will prompt. Select either Merge or Skip in order to keep the changes that you have made.

Teams - Migration

Overall configuration

Follow the overall configuration for all Teams library packs.

Mandatory configuration

- No mandatory configuration is required.

Teams - Health

Overall configuration

Follow the overall configuration for all Teams library packs.

Mandatory configuration

- No mandatory configuration is required.

Teams - Advanced health

Overall configuration

Follow the overall configuration for all Teams library packs.

Remote Actions

- The Advanced Health solution pack delivers some additional metrics which provide further detail on the landscape. These are provided by Remote Action?s which can be configured to run on an as-needed basis or regularly.
- There are three Remote Actions which can be used:

Remote Action: Get Teams Info

- This Remote Action is found within the Nexthink Library > On Demand area:

- The data returned by the remote actions are:
    - ♦ Devices with Connection Issues ? these are devices that have reported a problem connecting to the Teams service within the last 24 hours.
    - ♦ Devices with Authentication Issues ? These are devices that have reported a problem with Authentication of the user within the last 24 hours.
    - ♦ Users Making Calls ? This is a count of the number of calls made by a user over the last 24-hour period.
    - ♦ Deployment Ring ? This is the Microsoft Deployment Ring if there are users that are members of the Technology Adopter Programme for Microsoft Teams. Note that this is separate and different from the Nexthink "Teams User Deployment Ring" which is entirely configurable by the Nexthink Administrator as they wish.

Remote Action: Reinstall Teams Client

- This Remote Action can be used to initiate an install or reinstall action of the latest version of the Teams Client on the given device.

- The Remote Action will work in the context of the current interactive user, if no user is logged on it will exit.

- If the user is not using Teams then it will upgrade Teams in the background (although note that as part of this Teams executes once installed, which is unavoidable).

- If the user is logged in then a campaign is launched allowing the user the choice of installing Teams, skipping or deferring:

- Once the reinstallation has completed the Campaign closes with a final message confirming it has run and then exits.

Remote Action: Invoke Network Assessment Tool

- This Remote Action executes the Skype for Business Network Assessment Tool. Despite its title, this tool can be used universally to test connection quality for Teams or Skype for Business and is based upon the execution on the client of the free tool directly from Microsoft.

- The Remote Action currently relies on the tool being installed on the client, in the default location, therefore before executing the tool it should be deployed via software distribution or manually to as many machines as are wished.

- Once present, the Remote Action should be set to be able to be run on demand and can then be executed against the machine(s).

- The tests will take approximately 30 seconds and the output will be a set of values that determine the quality of the connection.

Along with the actual returned values, the solution also output?s whether these values pass or fail Microsoft?s benchmarks for a suitable quality connection for Teams

- This RA can be run as a one-off test to check quality but also on a regular basis to confirm line quality on a daily or weekly basis.

The Advanced Health data can all be seen on the Advanced Health Dashboards that are part of the Pack:

Teams - Adoption

Overall configuration

Follow the overall configuration for all Teams library packs.

Categories

- The same campaigns are meant to be sent to "Early Adopters" and "Production" users, but at different times. Therefore, it is recommended to categorize the target audience for each campaign with an additional category "Teams User campaign recipients".

Campaigns

- All Campaigns must be configured with the Sender Name, Title and Picture.

- All Campaigns can optionally be translated, and the display texts can be edited but it is not recommended to change the structure of the campaigns, the type of questions, the names of the answers, etc.
- The company?s logo can be uploaded in Portal to customize the look and feel of the notification.

Step by step guide

Assess who would like to become Early adopter

The first campaign "Teams - early adopters" can be sent to all employees to assess who would be interested in becoming part of the "Early Adopter" program.

1. Create investigation to target recipients. In this case it?s a straight-forward "select all users" investigation.
    1. Create and save an investigation to select all users.

2. Publish campaign
    1. Drag & drop the newly created "All users" investigation into the recipients' section of the campaign

2. Optionally preview the campaign

3. Publish the campaign

3. Wait for few days/week and view results in the dashboard "Early adopters: Overview".
    1. Go to Portal > Module "MS Teams" > Dashboard "Early Adopters: Satisfaction"

    2. Mouse over the KPI in the dashboard and click on "Show details" to get the list of users

4. Alternatively, view results in Finder.
    1. Go to Finder > Campaign "Teams - early adopters" > Display results
    2. Read results in the "List" view of Finder
5. After enough time is elapsed, retire the campaign.

Categorize users as Early adopters

Early adopter users can be identified in a various number of ways.

1. Categorize users as Early adopter.
    1. Create and run an investigation to select all users willing to become an Early adopter.
    2. Select all users > Click "Edit" > Select category "Teams User deployment ring" > set keyword "Early adopter" > Click on "Apply"

Get pre-deployment baseline from Early adopters

When Early adopters are defined, the second campaign "Teams - early adopters" can be sent to get baseline figures.

1. Create investigation to target recipients. In this case, users need to be categorized as "Pre-deployment" within Category "Teams User campaigns recipients".
    1. Create and run an investigation to select all users tagged as "Early adopters".

    2. Select all users > Click "Edit" > Select category "Teams User campaign recipients" > set keyword "Pre-deployment" > Click on "Apply"

2. Publish campaign
    1. The campaign already targets all users tagged with "Pre-deployment". Nothing to do here.

    2. Optionally preview the campaign

    3. Publish the campaign

3. After few days/weeks, view results in the first dashboards in the "MS Teams" module.
    1. Go to Portal > Module "MS Teams" and observe results in the "Early adopters: Satisfaction" dashboards.

    2. Track the satisfaction score and the number of "happy users" (those who answered with "Completely happy" or "Very happy").

3. Check the Respondents ratio and Total respondents to know if you can trust the results.

4. Note: The Respondents ratio and Total respondents can vary when navigating in the hierarchy.

5. Check the distribution of the satisfaction score.

6. Check what users like and dislike the most.

4. View results in the second dashboards in the "MS Teams" module.
    1. Go to Portal > Module "MS Teams" and observe results in the "Early adopters: Adoption" dashboards.

2. Track the average number of times per week that your employees use collaboration tools, and the average number of hours per week.

3. Ensure that the Respondents ratio and Total respondents are high enough.

4. Check the distribution of the usage ? the top chart shows "How many times per week" and the bottom chart shows "How many hours" per week. (Note: the next version of the library pack will indicate this in a better way.)

5. View results in the third dashboards in the "MS Teams" module.
    1. Go to Portal > Module "MS Teams" and observe results in the "Early adopters: Collaboration" dashboards.

    2. Track the Collaboration score, both over all the population and over only those who collaborate with remote teams (this is the most important population of users).

    3. Ensure that the Respondents ratio and Total respondents are high enough.

    4. Check the distribution of the preferred collaboration method.

    5. Check your users' locations. Focus on those who work in different buildings or countries.

6. In addition, read what users add as comments in Finder.
    1. Go to Finder > Campaign "Teams ? pre-deployment" > Display results

    2. Read results in the "List" view of Finder.

[Optional] New users join the Early adopter programs

It can happen that new users need to be added on to the Early adopter program at any stage. If it happens, follow the steps in chapter "Categorize users as Early adopters" to categorize them as "Early adopters" in category "Teams User deployment ring". Once this is done, follow the steps in chapter "Get pre-deployment baseline from Early adopters" to categorize them as "Pre-deployment" in category "Teams User campaigns recipients". If the campaign is still published, the new users will be picked up by the investigation and be targeted with the "Pre-deployment" campaign within the next few minutes.

Deploy Teams

After enough users have replied to the ?pre-deployment? campaign, retire it and deploy Microsoft Teams to them.

Get post-deployment feedback from Early adopters

After Microsoft Teams is deployed, wait for few days/weeks before publishing the "post-deployment" campaign.

1. Create investigation to target the campaign's recipients. This time, users need to be categorized as "Post-deployment" with Category "Teams User campaigns recipients".
    1. Create and run an investigation to select all users tagged as "Early adopters".
    2. Select all users > Click "Edit" > Select category "Teams User campaign recipients" > set keyword "Post-deployment" > Click on "Apply"
2. Publish campaign
    1. The campaign already targets all users tagged with "Post-deployment". Nothing to do here.
    2. Optionally preview the campaign.
    3. Publish the campaign.

3. View results in the same three dashboards as described above "Early adopters: Satisfaction", "Early adopters: Adoption", "Early adopters: Collaboration".
4. Additionally, check the "Early Adopters: Overview" dashboard for a side-by-side overview comparison of the figures before and after the deployment of Microsoft Teams.
    1. Go to Portal > Module "MS Teams" and observe results in the "Early adopters: overview" dashboard.
    2. Compare the user satisfaction pre- and post-deployment
    3. Compare the user adoption (hours per week and times per week) pre-and post-deployment.
    4. Compare the user collaboration score pre- and post-deployment.

5. Check on the final answer "Overall, do you think Microsoft Teams is an improvement on your previous collaboration tools?"

5. In addition, read what users add as comments in Finder.
    1. Go to Finder > Campaign "Teams ? post-deployment" > Display results
    2. Read results in the "List" view of Finder.

[Optional] Staged deployment of Microsoft Teams

It can happen that all users do not get Teams installed all at the same time. If this happens, users can receive the "post-deployment" campaign in the same staged order. To achieve this, simply categorize users by batch as "Post-deployment" within category "Teams User campaigns recipients". The campaign needs to be published for the first batch and then remain published while each new batch of users get tagged.

On to Production

Following same process as described above, the same steps need to be repeated for Production users.

1. Tag users as "Production" in category "Teams User deployment ring".
2. Tag users as "Pre-deployment" in category "Teams User campaigns recipients".
3. Publish campaign "Teams - pre-deployment".
4. After few days/week, retire campaign "Teams - pre-deployment".
    1. Note: alternatively, if you wish to keep the campaign published and migrate users at the same time: When deploying Teams to a set of users, remove the tag "Pre-deployment" in category "Teams User campaigns recipients" before the migration. This will ensure they do not receive the campaign anymore.
5. Few days/week after Teams deployed to a set of users, tag them as "Post-deployment" in category "Teams User campaigns recipients".
6. Publish campaign "Teams ? post-deployment".

Continuously monitor users' satisfaction

With Microsoft Teams deployed, this campaign asks users about their satisfaction on their last audio call. The campaign triggers automatically after a call is made, and "times out" (I.e., does not appear again to the same user) for one week. Note: the time out period can be changed in the campaign.

1. Publish campaign
    1. The campaign targets all users tagged as "Post-deployment", who makes a call. Nothing to do here.

    2. Optionally preview the campaign.

    3. Publish the campaign.

2. After few days/weeks, view results in the two corresponding dashboards in the "MS Teams" module.
    1. Go to Portal > Module "MS Teams" and observe results in the "Early adopters: Overview" or "Production: Overview" dashboards
    2. Track the satisfaction score over the last 30 days
    3. Track the satisfaction score over time
    4. As always, make sure that the Respondents ratio and Total respondents are high enough.

Office 365 ProPlus

Office 365 ProPlus - Operate

Overview

The 'Office 365 ProPlus - Operate' is a flexible Library Pack which allows considerable configuration. When managing the Production Landscape, it is possible to separate machines according to multiple criteria to accurately reflect your testing environments, ensuring that proper testing of all required profiles takes place before an update arrives in Production.

The pack is capable of tracking any update type, be it a Full Version or Monthly Quality update via Category configuration, it is entirely up to the Operator to decide which version(s) of Office 365 ProPlus will be tracked by the pack.

It also integrates with the Win10:Configuration pack if you wish to classify which are Business critical users or devices. Any configuration made in that pack is read by the ProPlus pack.

Configuration

As part of the initial configuration of the pack Devices can optionally be configured according to their importance to the business, which is done as part of the Win10:Configuration pack, therefore this must be imported before the Office 365 ProPlus pack and the categories for the Business and User Criticality configured. The remaining steps after this below are for the Office 365 ProPlus pack:

1. Pre-requisite: Win10:Configuration (optional Step)
    1. Prioritizing your packages
    2. Prioritizing your device models
2. Configure Category ?ProPlus Device Ring? (otional but recommended step)
    - Assign devices to the desired Rings for to match your Organizations release structure. For example, if you wish to deploy to two testing rings before Production the pack comes preconfigured with Ring 0, Ring 1 and Production. If you have more (or less) testing Environments before Production you can add, remove or rename accordingly.

- ♦ The dashboards "Create Representative Rings" and "Prioritized Devices Distribution" help you understand what your current Ring contents are, to make sure that:
    - ◊ No device is wrongly assigned to a ring (E.g., MacOS, ProPlus not installed etc)
    - ◊ No device is missing a ring (E.g., a Windows 10 device that is not in Ring 0, Ring 1 or Production)

3. Now configure Categories "ProPlus Required Version", "ProPlus Version" and "ProPlus Unsupported Version" to reflect your desired configuration:
    - ♦ The Solution Pack is entirely flexible in terms of what versions of ProPlus you wish to monitor. By configuring these Categories you are describing which versions of ProPlus you wish to monitor:
        - ◊ ProPlus Required Version - this should contain the version number(s) you will be upgrading to. Note that any version number can be added and multiple versions can be used (for different branches). Details on ProPlus version history is published by Microsoft.
        - ◊ ProPlus Version - this should contain all the versions of ProPlus which you currently support within your Organization, configured in the same way as the above Required Version Category.
        - ◊ ProPlus Unsupported Version - This should contain versions of ProPlus that your Organization does not support.

As your Office 365 ProPlus landscape evolves you should amend this Categories on a continual basis so that it accurately reflects the supported, unsupported and required versions for your Organization.

Virtualization

Virtualization: Health

Pre-Requisites

This pack requires some categories contained in the **Shared Categories** content pack, please make sure to have it installed in your environment before installing this pack.

Defining Excluded Applications

Configure Category **Virtualization - Excluded Applications** to list applications that will not be excluded from being reported on. This is prepopulated with a selection of common Applications which would not normally be wanted. Any number of applications can be added or removed.

Defining Back End Systems

Configure Category **Virtualization - Back End Systems** to define destinations that the Virtual Infrastructure will be communicating with in your environment. This category can be individual systems or contain entire ranges as is wanted.

Defining SBC Servers

Configure Category **Virtualization - SBC Server** to define the Session Based Computing Servers in your environment, such as Citrix or Remote Desktop Services servers. This category should be assigned to all servers that have the Collector installed and are SBC Server Systems.

Defining Different Virtualization Images

Configure Category **Virtualization - Virtual Image** to define the desktops that are running a particular VDI Image. This is then used for Image performance comparison within the Solution Pack. Rename the Images according to needs in the Category configuration.

Virtualization: Operate

Pre-Requisites

This pack requires some categories contained in the **Shared Categories** content pack, please make sure to have it installed in your environment before installing this pack.

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Configure Category **Virtualization - SBC Server** to define the Session Based Computing Servers in your environment, such as Citrix or Remote Desktop Services servers. This category should be assigned to all servers that have the collector installed and are SBC Server Systems.

Defining Different Virtualization Images

Configure Category **Virtualization - Virtual Image** to define the desktops that are running a particular VDI Image. This is then used for Image performance comparison within the Solution Pack. Rename the images according to needs in the category configuration.
For instance one keyword could be named "Windows 10 VDI". Then tag your virtual machines to the keywords you just created. Here is a link to the documentation on how to tag objects with Nexthink.

Defining VDI Network Physical / Virtual

We suggest you to adapt the network response time used in the VDI Network Physical / Virtual dashboard to measure your most important response time; for instance, the response time when connecting to a critical service in your company. To do this edit the metrics *Virtualization - Operate - Average network response time on physical devices* and *Virtualization - Operate - Average network response time on virtual devices*.

To clean the Library Pack

Please refer to the Disclaimer
Before cleaning, you can backup your **"Virtualization Operate"** Library Pack version. To backup, follow this link.

◊ **In the Finder:**

In each section described, right-click on **"Library\Virtualization Operate"** and delete.

- Services
- Metrics
- Categories
- Score

◊ **In the Portal:**

Go on the **"Virtualization Operate"** module menu then click on **"Delete Module..."**
Go on the **"Virtualization Operate Service"** module menu then click on **"Delete Module..."**

Disclaimer

The operations described in this article should only be performed by a Nexthink Engineer or a Nexthink Certified Partner.

If you need help or assistance, please contact your Nexthink Certified Partner.

Virtualization: Planning and Migration

Solution Packs Detail

The Virtualization Solution Pack?s focus on the Virtual landscape of customers, enabling both high-level overview statistics as well as

deep-dive insights and recommendations to help with the Digital Experience of the Virtual environment?s users.
The Solution is made up of four Library Packs:

- **Health** - Monitors the status of the Virtual Landscape running in Production.
- **Advanced Health** ? Additional Monitoring for Customers that have the Nexthink Act Module
- **Sentiment** ? Enables user sentiment feedback through campaigns to understand if the technical metrics are being correlated with genuine user feeling.
- **Planning and Migration** ? Focusing on organizations that wish to migrate to a Virtual solution and want to understand which users, personas, applications, and devices are good (or bad) candidates for this.

This Document concerned the **Planning and Migration** pack.

- **Investigations** : 1
- **Services** : 3
- **Metrics** : 132
- **Categories** : 9
- **Campaigns** : 2
- **Score** : 1
- **Remote actions** : 1

Individual Library Pack configuration

Virtualization: Planning and Migration

1. **Mandatory Configuration**
   Please refer to the disclaimer
2. **Optional Configuration**
   Nine possible optional Nexthink Categories in this pack:

1. **Pilots Categories**
   There is no limit to what can be configured. It is perfectly reasonable to remove any of the above or add any that are wished for.
   - **Virtualization - Pilot Devices**

This Category determines the VDI Pilot groups. This can be used for performance testing and, if required, a Production image comparison between two groups of pilots.

- **Virtualization - Pilot Applications**

This Category determines the Virtualization Pilot groups. This can be used to managed and the categories of the application in the pilot step.

- **Virtualization - Excluded Users**

This Category determines the Virtualization Pilot groups. This can be used to managed and the categories to exclude any users from the pilot.

- **Virtualization - Excluded Devices**

This Category determines the VDI Excluded devices. This can be used to exclude any devices from becoming VDI images if IT have so decided.

- **Virtualization - Excluded Applications**

This lists applications which are not wished to be reported on. There are some default categories which are populated out of the box:

2. **Services Categories**
   Here you can customize the categories to define a service monitoring for the VDI devices, Pilots devices per group, and the VDI connections to the infrastructure.
   - **Virtualization - Clients Executables**
   - **Virtualization - Clients Ports**
   - **Virtualization - Clients Domains**

3. **To clean the Library Pack:**
   Please refer to the disclaimer
   Before cleaning, you can backup your **"Virtualization Planning and Migration"** Library Pack version. To backup, follow this link.
   · **In the Finder:**
   In each section described, right-click on **"Library\Virtualization Planning and Migration"** and Delete.
   - Investigations
   - Services
   - Metrics
   - Categories
   - Campaigns
   - Score

· **In the Portal:**
Go on the **"Virtualization Planning and Migration"** module menu then click on **"Delete Module..."**

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Windows

Win10: Configuration

Prioritizing your packages

1. Configure Category ?Package Priority? to categorize all applications running in your environment in one of four keyword
   · 1. Business Critical - has impact on the business
   · 2. User Critical - has impact on departments, groups of people, etc.
   · 3. None - has no impact, no priority
   · 4. Out of scope - not in scope

Prioritizing your device models

1. Configure Category ?Device model Priority? to categorize all device models found in your environment in one of four keyword
   · 1. Business Critical - has impact on the business
   · 2. User Critical - has impact on departments, groups of people, etc.
   · 3. None - has no impact, no priority
   · 4. Out of scope - not in scope

Win10: Migration

Assessing software readiness

1. Pre-requisite: Win10:Configuration
   1. Prioritizing your packages
      Note: Only packages that are prioritized as "Business Critical" or "User Critical" are displayed.
2. Configure Category ?Win10 Package readiness? to categorize the applications in one of four keyword
   Ready - Can run on Windows 10
   Not Ready - Cannot run on Windows 10
   Unspecified - Compatibility with Windows 10 has not been assessed yet
   Out of scope - not in scope for migration

Assessing hardware readiness

1. Configure Category ?Win10 Device CPU readiness? to categorize the devices in one of four keywords
   - Ready - CPU is ready for Windows 10
   - Not Ready - CPU is not ready for Windows 10
   - Insufficient data - CPU needs to be assessed manually
   - Out of scope - not in scope for migration
2. Configure Category ?Win10 Device memory readiness? to categorize the devices in one of four keyword
   - Ready - Device memory is ready for Windows 10
   - Not Ready - Deice memory is not ready for Windows 10
   - Insufficient data - Device memory needs to be assessed manually
   - Out of scope - not in scope for migration
3. Configure Category ?Win10 Device graphical memory readiness? to categorize the devices in one of four keyword
   - Ready - graphical memory is ready for Windows 10
   - Not Ready - graphical memory is not ready for Windows 10
   - Insufficient data - graphical memory needs to be assessed manually
   - Out of scope - not in scope for migration
4. Configure Category ?Win10 Device disk readiness? to categorize the devices in one of four keyword
   - Ready - Device has enough free space in system drive
   - Not Ready - Device has not enough free space in system drive
   - Insufficient data - Device free space needs to be assessed manually
   - Out of scope - not in scope for migration
5. Configure Category "Win10 Device overall hardware readiness? to categorize the devices in one of four keyword
   - Ready - Device hardware is ready for Windows 10
   - Not Ready - Device hardware is not ready for Windows 10
   - Insufficient data - Device hardware needs to be manually assessed
   - Out of scope - not in scope for migration

Monitoring migration progress

1. Pre-requisite: Install & configure Digital Experience Score
2. Configure Category "Win10 Device migration? to categorize the devices in one of 3 keyword
   1. To migrate - Devices not yet running Windows 10
   2. Migrated - devices running Windows 10
   - Out of scope - devices not in scope for migration

Win10: Feature Update

Creating representative rings for feature updates

1. Pre-requisite: Win10:Configuration
    1. Prioritizing your packages
    2. Prioritizing your device models
2. Configure Category ?Win10 Device ring for feature update?

The dashboard "Create representative rings" helps you to make sure that

- No device is wrongly assigned to a ring (E.g., MacOS, Server, etc)
- No device is missing a ring (E.g., a Windows 10 device that is not in Ring 0, Ring 1 or Production)
- No device is assigned twice (E.g., a device that is in Ring 0 for the Quality update and Ring 1 for the Feature update. A device that is assigned in Ring 0 in Quality update must be in Production for the Feature update, etc.)

Migrating and monitoring the next Feature update version

1. Pre-requisite: Create representative rings for feature update
2. Pre-requisite: Install & configure Digital Experience Score
3. Configure Category ?Win10 Feature update target build? with the target build numbers of Windows 10.

Win10: Quality Update

Creating representative rings for quality updates

1. Pre-requisite: Win10:Configuration
    1. Prioritizing your packages
    2. Prioritizing your device models
2. Configure Category ?Win10 Device ring for quality update?

The dashboard "Create representative rings" helps you to make sure that

- No device is wrongly assigned to a ring (E.g., MacOS, Server, etc)
- No device is missing a ring (E.g., a Windows 10 device that is not in Ring 0, Ring 1 or Production)

- No device is assigned twice (E.g., a device that is in Ring 0 for the Quality update and Ring 1 for the Feature update. A device that is assigned in Ring 0 in Quality update must be in Production for the Feature update, etc.)

Migrating and monitoring the next Quality update version

1. Pre-requisite: Create representative rings for feature update
2. Pre-requisite: Install & configure Digital Experience Score
3. Configure Category ?Win10 Quality update target build? with the target build numbers for each versions of Windows present in your environment.

Windows Defender

Pre-requisite:

The windows management pack is correctly imported on the Finder

Configure the protection level

Protection level

By configuring the protection level you will be able to focus on the level of protection that matters for you.

You can update the protection level with the **following steps**:

1. On the finder, edit the metric: "WinDefender - Devices with any protection disabled"
2. Delete unwished protection levels, and it will not be taken into account:

    - Antivirus enabled
    - AntiSpyware enabled
    - Behavior Monitor enabled
    - Ioav protection enabled
    - NIS enabled
    - On access protection enabled

Configure RA execution frequency

You can set an investigation to execute the RA automatically.

To do so, you can **follow the steps below** on the Finder:

1. Navigate to the On-demand remote action folder
2. Edit the "Get Windows Defender Information" remote action
3. Tick "Automatically run the remote action"
4. if needed, modify the the investigation execution frequency (default value is every 1h)

Administrators Management

Pack configuration

Administrators Management:

1. **Optional Configuration**
   Two possible optional Nexthink Categories in this pack:
2. **Pilots Categories**
   There is no limit to what can be configured. It is perfectly reasonable to remove any of the above or add any that are wished for.
   · **AdministratorsManagement - Administrators Whitelist**
   This Category determines the AdministratorsManagement whitelist. This can be used to exclude administrators from the metrics except for external/web/mail traffic.
   It will help you to detect unauthorized admin

   · **AdministratorsManagement - Destinations tagging**
   This Category determines the mail/proxy network fqdn.
   It will help you to limit the risk of administrator exposure on the Internet to prevent serious infections.

3. **To clean the Library Pack:**

Before cleaning, you can backup your **"AdministratorsManagement"** Library Pack version. To backup, follow this link.

· **In the Finder:**

In each section described, right-click on **"Library\AdministratorsManagement"** and Delete.

- ♦ Metrics
- ♦ Categories

· **In the Portal:**

Go on the **"AdministratorsManagement"** module menu then click on **"Delete Module..."**

Remote Actions

Get Performance Monitor Data

Overview

With this Remote Action, execute Data Collector Sets and move the reports to a desired shared folder.

Prerequisites

There is not any special requirement to use this Remote Action. It is possible to configure your custom Data Collector Set, otherwise *System Performance* is used as the default one.

To better understand how to configure a shared folder to work with Nexthink Act, please visit this page.

Custom Data Collector Set

To customize your own Data Collector Set, please, have a look at this link.

The XML scheme needs to be available in a shared folder to be used by the Remote Action.

Execution context

The Remote Action must be executed as LocalSystem, in order to have the right of executing Performance Monitor analysis.

Input parameters

To a good usage of the Remote Action, set these input parameter values:

Parameter	Description	Value
MaximumDelayInSeconds	To avoid overloading the network when saving the reports	30
XMLPath	"" to execute the default Data Collector Set called *System Performance* or an UNC path to	""

	the configured XML scheme	
OutputFolderPath	UNC path where the reports will be exported	eg. \\server\folder

Skype for Business

Skype for Business

Remote Action: Skype for Business Diagnostic

This remote action collects information **every hour** about Skype for Business for active devices. It creates 24 log files where every call is monitored and stored in its correspondent file.

The calls diagnostic stored in the engine, is the sumatory of those files with the data within the last 24 hours.

When the remote action is executed, it rotates all files and removes the last one if the elapsed time from the last execution is greater than one hour, otherwise the information gathered in the execution will be saved in the last file, replacing the information in it.

Make sure you have **FULL** or **LIGHT** logs enabled for Skype.

see how to enable Skype For Business/Lync logging

You should get the logs written on one of these two folders depending on the Skype version: %LocalAppData%\Microsoft\Office\16.0\Lync\Tracing **FOR SKYPE 2016** %LocalAppData%\Microsoft\Office\15.0\Lync\Tracing **FOR SKYPE 2015**

If the log files are empty, the Remote Action will not be able to return any Skype calls data.

Input parameters

- **MinSecondsForCall:** If the time since the call is established until it is finished is lower than the provided value, the call is considered as short. It is categorized in this way because some calls may become short due to technical issues.
- **NumHoursForTimeout:** The maximum duration to consider an unfinished

call as dropped call. When the remote action is being executed, there may be calls in progress, hence they are stored in a cache file. For the following attempts, if the duration of the call passes the provided value, it is categorized as dropped. The purpose of this value is to categorize dropped and unfinished calls properly, because they have the same traces in the Skype for Business logs.

The first value is useful for identifying calls properly established and dropped by either the caller or the receiver, but whose duration was too short to consider them as "normal" call. It covers the cases when the device is muted, or a wrong audio device was selected and the user has to leave the call and set it up again, etc.

The second parameter is useful for identifying calls established but still in progress or the ones which, due to a Skype crash, don't have the proper termination traces, hence they are never finished. When a call reaches the considered time, they are considered as dropped.

Desired remote action configuration

- **Schedule time:** Hourly. Recommended value, because otherwise the calls information is not stored within the set of logs properly hence it could imply a loss of data.

- **User context:** Current interactive user. The remote action needs to access data that is stored in the user folder.

- **Timeout:** At least 165 seconds. The remote action has an initial wait up to 45 seconds to avoid a huge quantity of devices writing the results in the engine at the same time.

How the remote action identifies each call result

To identify calls and process them properly, the remote action performs the following steps while it is reading text blocks from the Skype for Business logs:

The text "[xxx]" in the following examples, represents a text that is skipped, it is usually the user identity or email.

- Detects the request of a call by getting this message:

```
INFO  :: INVITE [xxx] SIP/2.0
```

- If the request block does not have these content types, it is skipped:

```
application/sdp multipart/alternative
```

- If the block is taken, the call mode is identified by these tags for audio, video or screen/application sharing:

```
m=audio m=video m=applicationsharing-video m=applicationsharing
```

- In case of gathering a **CANCEL** or **DECLINE** block, then it tries to get the reason of it by getting the value until the first ';' from ms client diagnostics node:

```
CANCEL [xxx] SIP/2.0 SIP/2.0 [xxx] DECLINE ms-client-diagnostics:
[NUMBER]
```

  ◊ If the value is **51004**, then the call is categorized as **REJECTED** and it does not count for the statistics.
  ◊ Otherwise, the call is categorized as **FAILED**.

- In case of gathering the BYE block, it means that the call was established and initiated, so then:

```
BYE [xxx] SIP/2.0
```

  ◊ If the value from ms client diagnostics is **51004**, then it is categorized as **SUCCESSFUL**, because this value is used also for calls finished properly when they have the **BYE** block.
  ◊ Otherwise, the call is categorized as **DROPPED** and the remote action tries to get the reason from ms client diagnostics node.

- In case of gathering the **SERVICE** block, it contains the **VQReport** with details about the call:

```
SERVICE [xxx] SIP/2.0
```

  ◊ When the result of the call is **SUCCESSFUL**, then the quality is measured, categorizing the call as **POOR** in case of any value is over the threshold recommended by Microsoft.

As it was mentioned before, the remote action stores calls information in several files. The calls with the **INVITE** block but without the **BYE**, nor **DECLINE**, nor **CANCEL**, are considered **calls in progress**, hence are stored in a .cache file. If after several remote action executions, the call duration is over the provided value in the parameter **NumHoursForTimeout**, then it is categorized as **DROPPED**, having an **Unknown** reason for the problem.

About the collected metrics/data

The values about the quality call are computed by Skype for Business and stored in the VQReport node within the log file. The remote action does not perform any calculation.

Those values are only available when the result of the call is **SUCCESSFUL** or **POOR** (it is categorized as POOR depending on the values), for **FAILED** and **DROPPED** only the main reason is provided.

The data collection is performed as detailed on the following link: skype metrics

Nexthink does not modify those values.

Calls statuses

All these types of calls can reach one o more of these final statuses:

- **Successful call:** A call of any type which was established and did not have any problem.
- **Failed call:** A call of any type which could not be established, or the destination did not receive, typically due to network issues. The users could not communicate each other because the call was not started, it was only an attempt.
- **Dropped call:** A call of any type which was established correctly but due to serious issues, was cancelled. **Skype cancelled the communication automatically**. If the users had finished the communication manually due to network issues, it would become a **poor call**.
- **Poor call:** A call of any type which was established but had some quality issues. A poor call may become dropped call if it is cancelled by Skype for Business.
- **Rejected call:** A call of any type which was cancelled by the caller or declined by the receiver before it can be established. **This status is not considered by the remote action.**
- **Short calls:** Uses input parameter "Min Seconds For Call". A call whose duration is lower than X seconds is a short call. **The calls not answered by the receiver are not included here, because they were not established**.

=How to interprete the NXT logs

About Nexthink Logs

The Nexthink logs are the files where the Remote Action stores the calls informaition for a day. They are available at this location: %LOCALAPPDATA%\Nexthink\SkypeForBusiness

Below you can see the data format:

Mode	Quality	Bad result reasons	Duration	Wifi
0	0	0	10	0
0	1/2	0	100	1
0	3	1	"Reason Network 1"	50
0	4/5	2	"Reason Network 2"	20
1	0	0	30	1
1	1/2	0	120	0
1	3	1	"Reason Timeout 1"	1000
1	4/5	2	"Reason Network 3"	500

Nexthink Logs details:

Mode attribute may be:

- 0 = Audio
- 1 = Video
- 2 = Sharing

Quality

- may be 0 if good
- 1 .. 13 if poor.

If poor, several values separated by '/' are accepted. Possible values in case of poor quality:

- 0 = Good
- 1 = PoorMOS
- 2 = PoorRoundTrip
- 3 = PoorPacketLoss
- 4 = PoorJitter

- 5 = PoorConcealed
- 6 = PoorVideoPostFECPLR
- 7 = PoorVideoLocalFrameLoss
- 8 = PoorRecvFrameRate
- 9 = PoorLowFrameRate
- 10 = PoorVideoPacketLoss
- 11 = PoorVideoFrameRate
- 12 = PoorDynamicCapability
- 13 = PoorRelativeOneWay

result may be:

- -2 = Unfinished (only for cache, **not to be included in log**)
- -1 = Rejected/Canceled
- 0 = Successful
- 1 = Failed
- 2 = Dropped

bad_result_reason attribute

contains a string with the reason for the call to be dropped/failed.

It may also be empty (result = Successful).

duration attribute

is the number of seconds that the call lasted.

wifi attribute

may be:

- 0 = Wired
- 1 = WiFi

Additional attributes might be available (e.g. device used for the communication).

Recommendation is to execute this remote action every hour to be able to access the generated files for each hour.

Restart Device

Overview

Tests if a restart is necessary due to too long device uptime, or pending patch installation, and based on provided input configures restart of the target device. The campaign is displayed to enable user immediate restart or postpone until the next script execution. After the restart, previously opened user's applications are restored.

Input parameters

Parameter	Description	Value
TestPatchPendingRestart	Controls if the script should verify if the device is pending restart due to recently installed patch. A positive result will lead to trying to restart the device following the options selected on the other inputs.	• Valid values: True/False • Default: True
CampaignId	Campaign GUID asking the end-user for restart. The end-user needs to respond NOW to trigger the restart. If not, the restart is postponed.	• Empty string ("") or empty GUID (00000000-0000-0000-0000-000000000000) are valid values only if ShowCampaign input is filled with "Never". • Default: 4fc67441-e4e3-4905-b533-620eb4083c2b
ShowCampaign	Determines circumstances the campaign is displayed to the end-user. The campaign will give the end-user the option to postpone the restart or execute it now.	• Valid values are: ♦ Always: Campaign is displayed to end-user at every remote action execution and device restart is never forced. ♦ DuringGracePeriod: End-user will have a limited time to postpone device restart. When the grace period expires, a

		forced restart is executed. The length of the grace period is provided in PostponeGracePeriodInDays input parameter. ♦ OnlyFirstExecution: End-user is notified via the campaign only the first time the remote action is executed. When the remote action is executed a second time the restart will be forced. ♦ Never: The end-user is never asked. The restart is always force. • Default: Always
DeviceUptimeInDays	Maximum number of days allowed for the device to be running without a restart. A day is 24 hours therefore, forced restart is triggered only if the remote action detects that end-user postponed restarting more than 24 hours ago.	• Range: 1-60. • Default: 30
PostponeGracePeriodInDays	Maximum number of days that end-user can postpone restart when ShowCampaign is DuringGracePeriod. This input will only take effect if the remote action is executed more than once.	• Range: 1-30. • Default: 7
RestartDelayInSeconds	Delay time between initiating restart and it's execution if restart conditions have been met.	• Range: 45-86400. • Default: 300

Recommendations

Recommended timeout: 720 Recommended way of use: Schedule the remote action to be executed once per day.

IMPORTANT: If you don't execute the RA periodically, PostponeGracePeriodInDays won't work as designed.

Common use cases

I want to keep the company devices restarted at least once each 15 days but I don't want to do it without the consent of the end-user

Recommended Inputs

- TestPatchPendingRestart: **false**
- CampaignId: **4fc67441-e4e3-4905-b533-620eb4083c2b**
- ShowCampaign: **Always**
- DeviceUptimeInDays: **15**
- PostponeGracePeriodInDays: **7** (this value won't affect the execution but needs to be an integer between 1 and 30)
- RestartDelayInSeconds: **300**

I want to enforce that the company devices have the latest Windows patch or restart devices that have been running more than 30 days. I want to let the end-user 3 days to restart in their own terms but if they don't, force the restart either way.

Recommended Inputs

- TestPatchPendingRestart: **true**
- CampaignId: **4fc67441-e4e3-4905-b533-620eb4083c2b**
- ShowCampaign: **DuringGracePeriod**
- DeviceUptimeInDays: **30**
- PostponeGracePeriodInDays: **3**
- RestartDelayInSeconds: **300**

I want the company devices to be restarted when their uptime is bigger than a week or when they have pending Windows patches. I want to ask one time but if they ignore the notification, the restart should be forced.

Recommended Inputs

- TestPatchPendingRestart: **true**
- CampaignId: **4fc67441-e4e3-4905-b533-620eb4083c2b**
- ShowCampaign: **OnlyFirstExecution**
- DeviceUptimeInDays: **7**
- PostponeGracePeriodInDays: **7** (this value won't affect the execution but needs to be an integer between 1 and 30)
- RestartDelayInSeconds: **300**

Other values

End-user execution: Current interactive user

Compatibility: Windows 10 and Windows 7