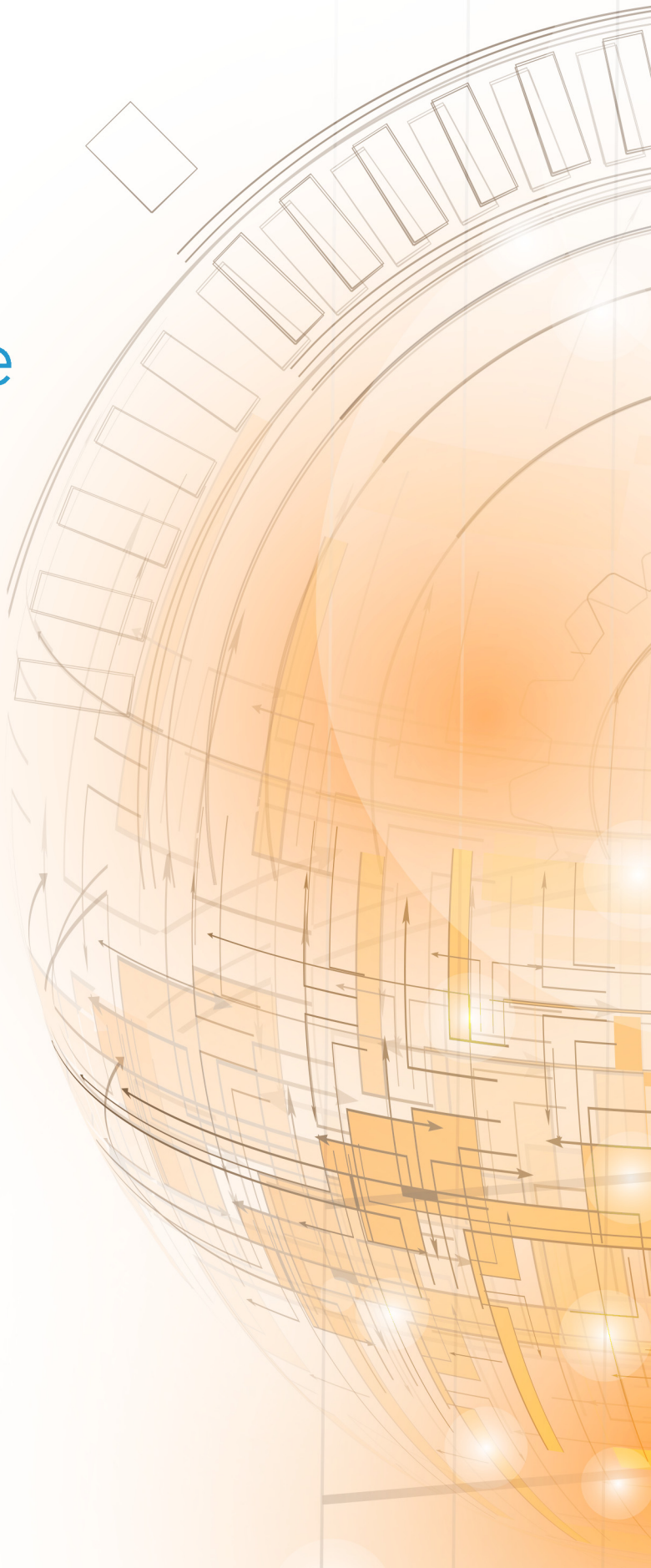
panagenda

OfficeExpert™

Setup Guide



SETUP GUIDE

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Welcome to panagenda OfficeExpert!

This guide will help you to set up panagenda OfficeExpert.

About OfficeExpert

OfficeExpert offers unique end-to-end performance analytics for Microsoft Office 365, Exchange, Outlook, OneDrive, Teams and Skype for Business, including

- End-to-end availability, service quality and performance measurements
- Automatic detection of anomalies and critical peaks
- On Premises installation for monitoring both Cloud and On Premises
- Smart measurements, including multi-client events, such as conferences
- Supports dedicated, distributed and enterprise-wide endpoints
- Synthetic and native Skype Client/Lync transactions
- Operational reliability monitoring for ADFS and single sign on

Setup Requirements

Please refer to the OfficeExpert Setup Requirements:
www.panagenda.com/download/OfficeExpert/OfficeExpert_SetupRequirements_EN.pdf

GETTING STARTED

Setup

In the downloads section of our website (www.panagenda.com/downloads-officeexpert), the latest versions of the following files are available:

- **panagenda_OfficeExpert.ova** – image file directly deployable via the VMWare vSphere client. It holds the OfficeExpert virtual appliance in open virtualization format (OVF)
- **OfficeExpert.zip** – OfficeExpert bot installer files for simulation machines
- **OfficeExpert_WinProxy.msi** – Install Wizard for the Windows Proxy
- **OfficeExpert Setup Guide** – extended installation and configuration guide.

We recommend running OfficeExpert production systems in a VMWare vSphere/ESX enterprise environment. An additional option is VMWare Workstation which is mainly targeted at temporary evaluation environments and are not supported for production use.

Please note that a license file is required to run OfficeExpert. Please contact sales@panagenda.com to request a license.

Place the license file OfficeExpert.lic in a folder on your local hard drive. This file will be uploaded to the virtual appliance in a later step using the panagenda OfficeExpert web interface.

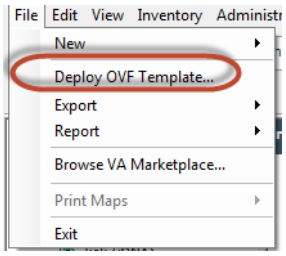
Starting up on VMWare Workstation

- Start VMWare Workstation
- Open Virtual Machine
  - Select the file panagenda_OfficeExpert.ova

Starting up on VMWare ESX, ESXi, or vSphere

Deploy OVF-Template

Open VMWare ESX, ESXi or vSpere and select:



The Deploy OVF Template dialog will open:

1. **Source:** Specify the location where you saved the OfficeExpert OVM file on your hard drive - for example: *C:/Temp/OfficeExpert.ova*

2. **OVF Template Details:** In this step you can inform yourself about the OfficeExpert version you are about to deploy. When you are done, just click on Next

3. **Name and Location:** Is the next relevant step for deploying OfficeExpert. We recommend to name this template "**panagenda OfficeExpert**"

4. **Storage:** Then you have to select a destination storage for the virtual machine files.

5. **Disk Format:** In this step, please select the format you want to store the virtual disks. We recommend to choose "Thick Provision Eager Zeroed"

6. **Network Mapping:** Then select the network the deployed OfficeExpert template should use.

7. **Ready to Complete:** In the final step you are shown the options you set up. Click on Finish if you are satisfied with you setting to start the deployment task.

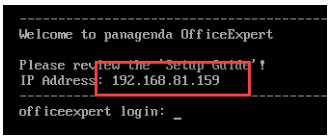
If you are prompted to update the VMWare Tools during appliance update, decline the request. Appropriate VMWare Tools are already installed on the panagenda OfficeExpert appliance.

Starting the Virtual Appliance

For VMWare products, we recommend raising the hardware version of the virtual machine according to your environment.
Further information: *https://kb.vmware.com/s/article/1010675*

Welcome Screen and IP Address

After starting up the appliance for the first time, you should be presented with a panagenda OfficeExpert welcome screen. If your network has a public DHCP server available, the system might already have acquired an IP address and will display the URL. **Use the shown IP address (interface URL) in your web browser to connect to the panagenda OfficeExpert web interface.** If DHCP is not available within your network or the panagenda OfficeExpert appliance did not acquire any IP address, you have to configure the panagenda OfficeExpert appliance network settings (see "Network Settings:" on page 10).



Appliance Login

OfficeExpert provides a console and a graphical user interface in order to configure operating system level settings like network, time and time zone settings.

Default login information:
user "root" with password "config"

Changing default credentials:

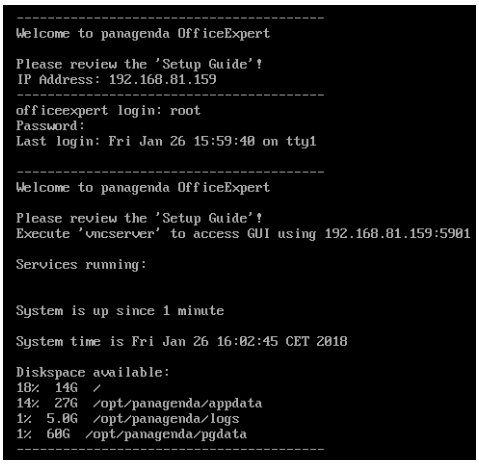
Default credentials are supplied for setup and initial configuration. It is not recommended to keep using them after the appliance has been set up.

We strongly suggest changing the default credentials for these components:

- Linux user "root" (using the "**passwd**" command)
- VNC server (https://www.panagenda.com/kbase/x/jA1wAQ)
- Web user "config" (https://www.panagenda.com/kbase/x/woLo)

Console

After login, basic information, such as disk space, system time and IP address, are shown:



Graphical User Interface

There are two ways to use the GUI to configure your OfficeExpert appliance:

1 **Local**

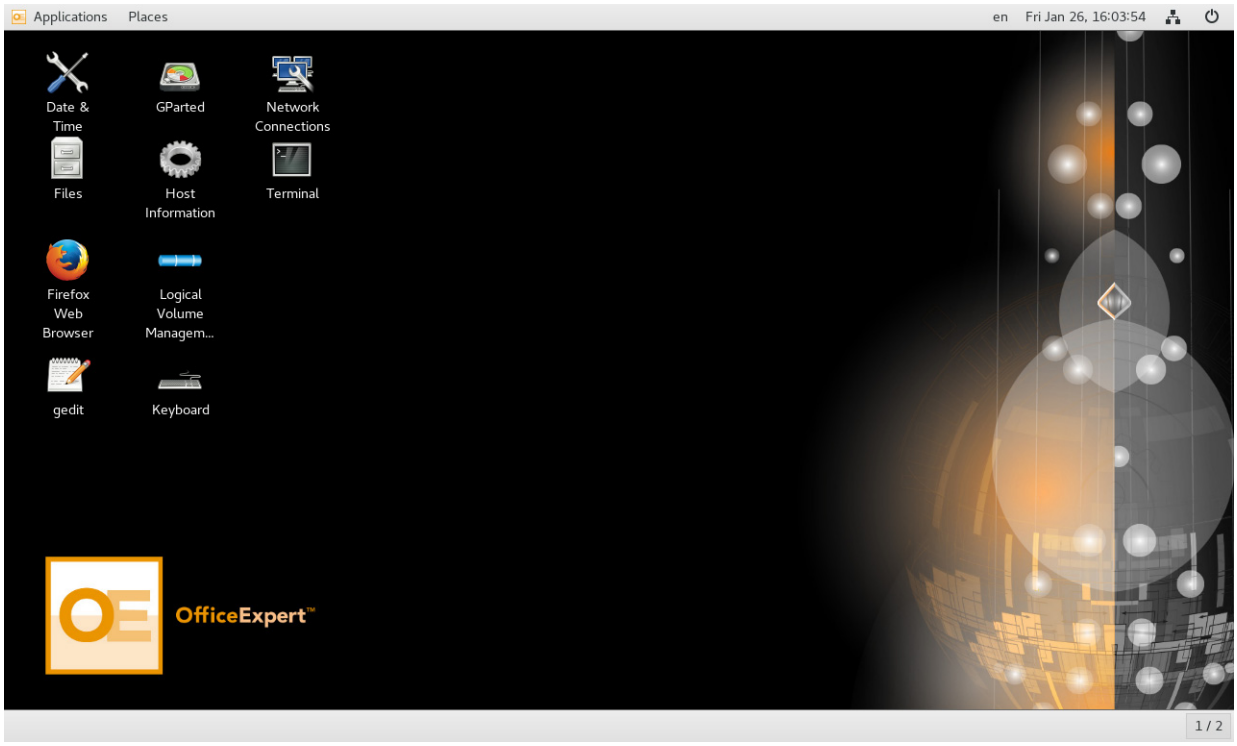
In order to start the GUI locally, enter the command "**startx**"
To start the GUI automatically when OfficeExpert is booted, please enter the following command: "**systemctl set-default graphical.target**"

2 **Remote Access via VNC**

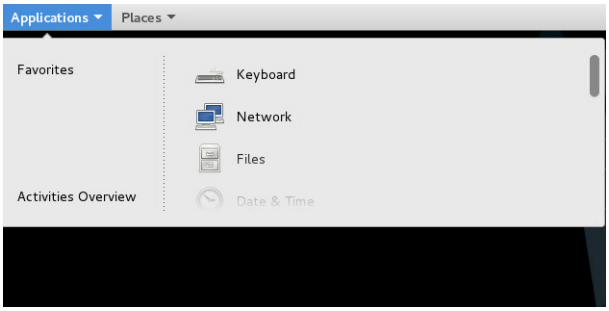
Please note that remote VNC access is only possible if the OfficeExpert appliance received an IP address via DHCP.

Please refer to https://www.panagenda.com/kbase/x/jA1wAQ (Remote Appliance Access) for more details on VNC access.

GUI Basics



The Applications menu provides access to all required applications:



You can access all required applications by using the desktop icons, too.

To check an established internet connection, a **web browser** (Mozilla Firefox) is available on the panagenda OfficeExpert appliance.

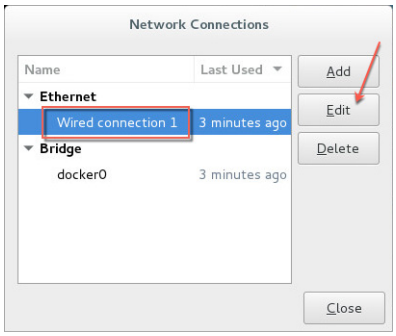
You can use the **terminal window** to check if your TCP/IP connection is established, using Linux *ping* and *ifconfig* command. For more information about *ping* and *ifconfig* commands, type *man ping* or *man ifconfig* in the terminal console window.

panagenda OfficeExpert log files can be found within the /opt/panagenda/logs directory. Use the **Files** app to navigate to these log files.

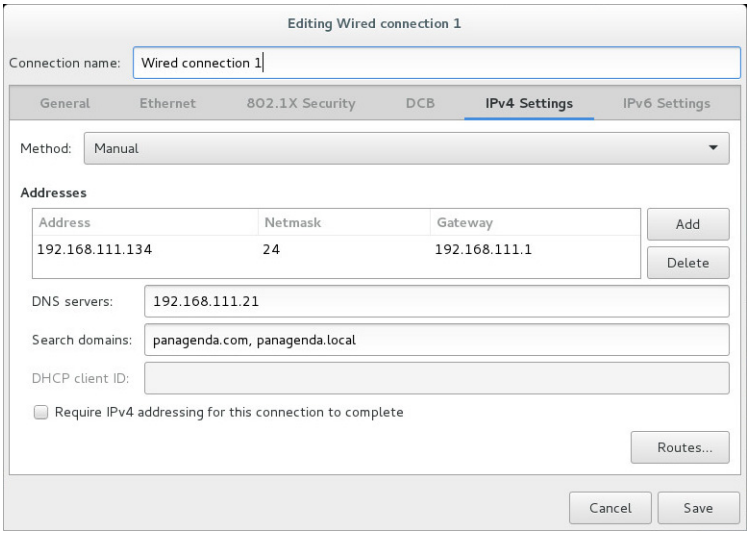
To check the panagenda OfficeExpert appliances system behavior, you can use the installed **system monitor**.

Network Settings:

To change the IP address and DNS configuration please click on the **Network** icon. Select the *Ethernet* connection and click on *Edit*:



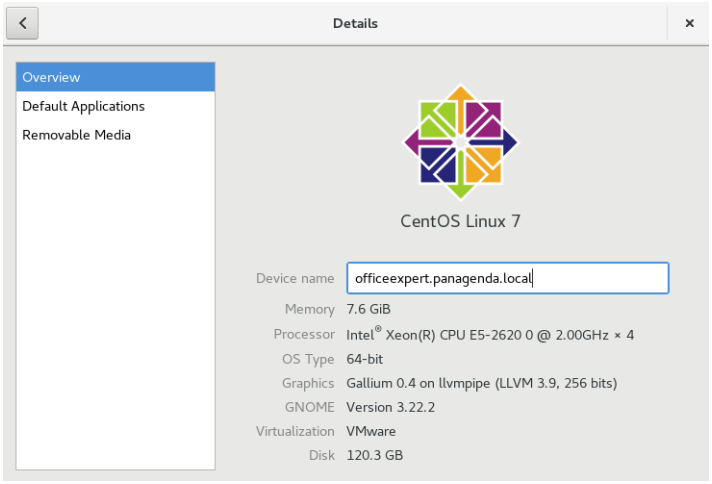
Go to the IPv4 Settings tab and select *Manual* from the *Method* drop down menu to configure the network settings as required:



TIP: If you configure "DNS Search domains", not full qualified names will also be resolved.

The virtual appliance MUST be able to resolve its own host name. Please verify that by opening a terminal window (click "Terminal" on the desktop) and using the ping command. It is recommended that both host/common name as well full qualified domain name are pingable.

Please adjust the host name (default is "OfficeExpert") in the **Host Information** application (Desktop Icon):



Time Zone Settings:

Please check the time zone settings of the appliance, use the **Time and Date** application to adjust.

It is very important to adjust the appliance's time zone. Please reboot the appliance after changing the date/time settings as the web server and database system require a clean start with the new configuration.

Configure Time Server:

Open a terminal and enter **vim /etc/ntp.conf**:

```
[root@officeexpert ~]#
[root@officeexpert ~]# vim /etc/ntp.conf
```

Please specify your internal NTP server in case you have any OR keep the existing NTP servers in the list:

```
# Use public servers from the pool.ntp.org project.
# Please consider joining the pool (http://www.pool.ntp.org/join.html).
server 0.centos.pool.ntp.org iburst
server 1.centos.pool.ntp.org iburst
server 2.centos.pool.ntp.org iburst
server 3.centos.pool.ntp.org iburst
server <local ntp server>
```

Run Setup Script

In order to set up panagenda OfficeExpert for your environment, please run the script:

open terminal console and enter the following command:

- **/opt/panagenda/appdata/setup/setup.sh**

The setup script creates all docker containers and generates the required files (certificates, key files, configuration files, CA, etc.) and copies them to the master and worker nodes.

The script will prompt for following information:

1. **Master node** – FQDN of the OfficeExpert appliance
2. **Passwords** – please set a SSL password (used for client simulations and the Windows Proxy host). The password needs to have at least 8 characters

```
[root@officeexpert setup]# ./setup.sh

Welcome to the panagenda Office Expert setup!

Please define a master node that will run the database.
master node: 192.168.153.130
The master node will be installed on '192.168.153.130'. Do you want to continue? [y/N] y


Please define a password for Kafka TLS.
Password:
Repeat password:
```

Please be aware that the OfficeExpert appliance uses the following two IP Ranges by default for the internal Docker communication:

172.17.0.1/16

172.20.0.1/16

Please adjust them in case these two IP Ranges conflict with your internal network.

For details please refer to https://www.panagenda.com/kbase/x/rA1wAQ.

OfficeExpert Web Interface

To connect to the panagenda OfficeExpert Web Interface, you have to enter the host IP address of the appliance (see “Welcome Screen and IP Address” on page 7) or its hostname (FQDN; see: “Network Settings:” on page 10) into your web browser’s address bar.

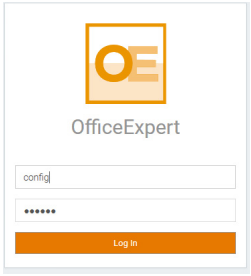
panagenda OfficeExpert uses HTTPS for secure communication between its appliance and its Web Interface, so you have to accept the security certificate, to go on.

Login

By default, a user with administrative credentials is available to access the panagenda OfficeExpert web interface.

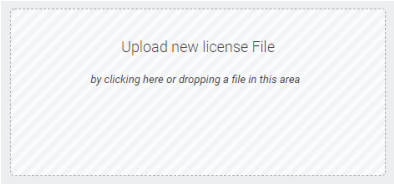
Default user login information

- Username: **config**
- Password: **config**

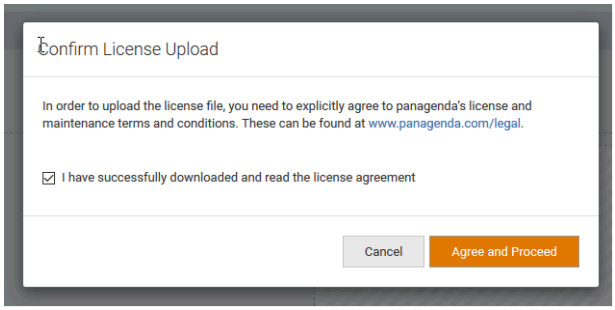


License File Upload

When you login for the first time as an administrator, you will be redirected to the license upload mask (later accessible via **Settings** > **License**). Upload your OfficeExpert license file by clicking in the corresponding area or by dragging and dropping the file to this area.



Please confirm the license agreement to proceed:



Please note that the available menu items depend on your OfficeExpert license.

Analytics Settings

Configuring these settings enables OfficeExpert to retrieve the following data:

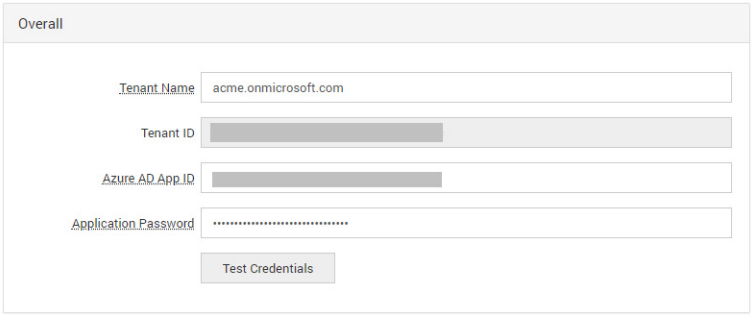
- Microsoft Teams data
- Overall usage data
- Services communication data

Fill in

- the **Tenant Name**
- and your **Azure AD App ID** into the corresponding fields (see"Azure Active Directory Application" on page 7 of the OfficeExpert Setup Requirements)

Please also enter

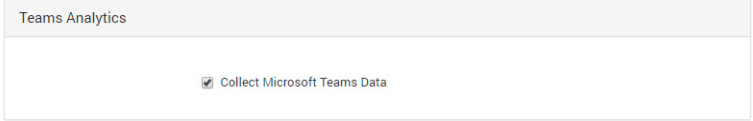
- your Office 365 **Application Password**



Tick

- the **Collect Microsoft Teams Data** checkbox to enable the OfficeExpert Teams Analytics module (unchecked by default)

If this option is disabled, only general usage data will be collected. Please tick this checkbox to enable OfficeExpert to collect MS Teams analytics data.



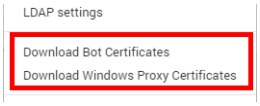
ATTENTION: The required API is disabled by default. Please refer to the following knowledge base article: *https://www.panagenda.com/kbase/x/Nwa0AQ*

If you do not have a license for the OfficeExpert "Ops Analytics (End User Experience)" module, your setup is completed and you can skip the following main chapter "Setup: Ops Analytics (End User Experience)".
Please have a look at the section "Additional Information" on page 28 for relevant links in the OfficeExpert knowledge base.

Setup: Ops Analytics (End User Experience)

Download Certificate Files

From the **Settings menu** in the OfficeExpert web interface you can directly start the download of the certificate files for the Windows Proxy server and the OfficeExpert simulation bots:



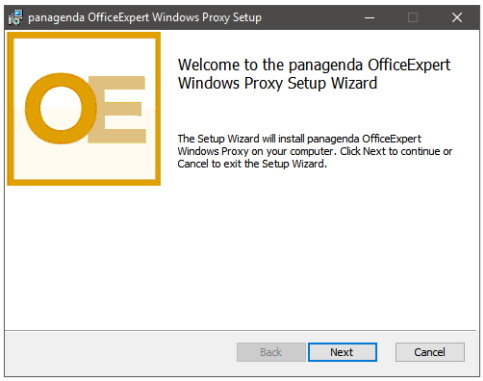
You will need these files for setting up the Windows Proxy (see "Windows Proxy Setup" on page 15) and the simulation bots (see "OfficeExpert Simulation Bot Setup" on page 17).

Windows Proxy Setup

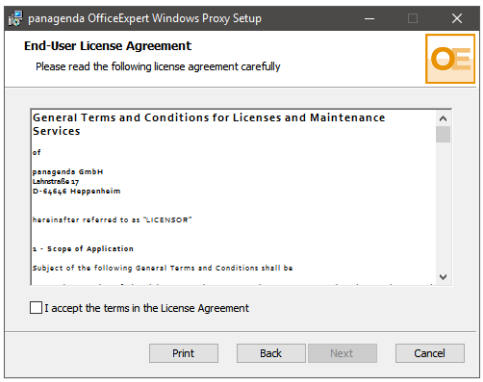
The OfficeExpert Windows Proxy server is responsible for the execution of PowerShell cmdlets. A Windows Proxy is required for the Azure Sync Simulation and for server monitoring.

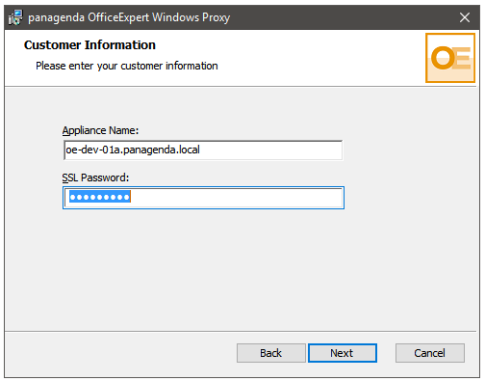
Before you start the set up, please make sure that Internet access is given during the installation and that all system requirements for the Windows Proxy server are met! (see "Windows Proxy" on page 17 of the OfficeExpert Setup Requirements)

To start the Setup Wizard, please execute the **OEWinProxy.msi** file on the Windows server:

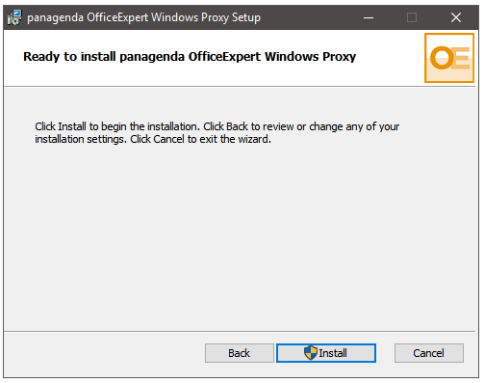


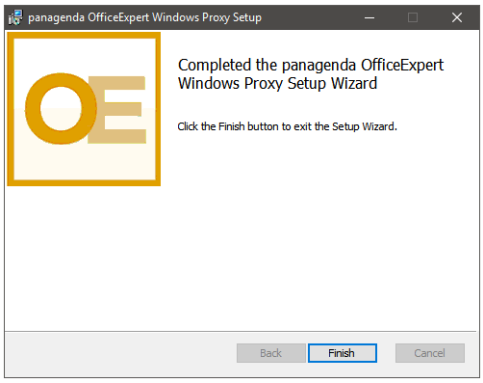
Follow the steps in the Setup Wizard: Accept the terms in the License Agreement & enter your customer information:





Afterwards, please click on the Install button and on Finish when the installation is completed:

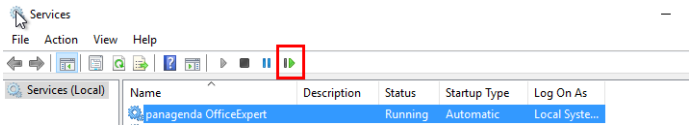




Please copy the previously download TLS files (see "Download Certificate Files" on page 15) to the folder **C:\Program Files\panagenda\WindowsProxy\as** on this Windows Proxy. These files are required:

- **client.jaas.conf**
- **kafka.client.keystore.jks**
- **kafka.truststore.jks**

Finally, please start the OfficeExpert Windows Service from the Windows Services panel (services.msc):



Log files can be found in the C:\ProgramData\panagenda\WindowsProxy\logs directory.

OfficeExpert Simulation Bot Setup

panagenda OfficeExpert simulation bots collect the required end-to-end analytics data.

Before you start the setup, please assure that all system requirements for the simulation bots are met! (see "Client Simulation Bots" on page 12 of the OfficeExpert Setup Requirements)

Installation

There are two setup options for OfficeExpert simulation bots:

1. Run the bot as console application
2. Run the bot as Windows service

The advantage of the latter is that the correct user credentials are stored in the Windows service properties. As a result there is no need for the correct user to be logged in. So even if, for example, administrators perform upgrades on the simulation machines, the bot services stay up and running. After every machine restart they are launched automatically.

LIMITATION: Running the OfficeExpert bot as Window service has (at the moment) the limitation that the Skype for Business Client Sensor will not work! Microsoft does not support this option.

General Setup:

- Create the folder **C:\ProgramData\panagenda\OfficeExpert**
- Unzip the OfficeExpert.zip file and copy both the **OfficeExpert.exe** and **configuration.json** to this OfficeExpert folder

- Finally, please copy the previously download TLS keys (see "Download Certificate Files" on page 15) to this folder. The following files are required:
  - **ca-cert**
  - **mc.key**
  - **nc.pem**

Run as Console Application:

Just execute **OfficeExpert.exe**.

Note that configuration.json has to be configured BEFORE you start OfficeExpert.exe. Please refer to "Configuration" on page 19.

Also note if you want to configure the simulation bot with modern authentication please refer to the following knowledge base article:
https://www.panagenda.com/kbase/x/n4bo

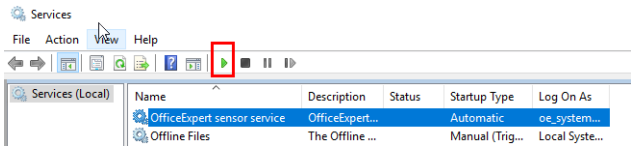
Run as Windows Service:

Run the following command to register the Windows Service (including username and password that is used for OS authentication):

- C:\ProgramData\panagenda\OfficeExpert>**OfficeExpert.exe install start -username "<username>" -password "<password>" --sudo**

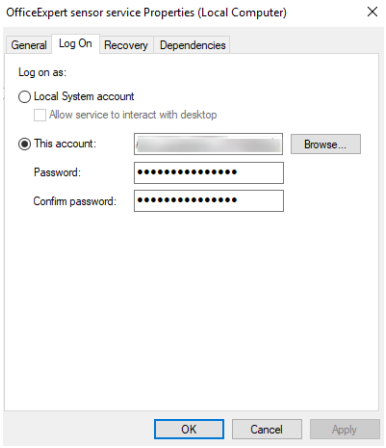
```
C:\ProgramData\panagenda\OfficeExpert>OfficeExpert.exe install start -username "                " -password "          " --sudo
```

- To start the bot application, select "**OfficeExpert sensor service**" in the Windows Service Manager and click on the play button:



The Startup Type is set to Automatic so the simulation bot is started automatically after every reboot of the machine.

To verify your user credentials, right click on the OfficeExpert sensor service in the Windows Service Manager, select **Properties** and open the Log On tab:



Configuration

To configure the OfficeExpert simulation bots, some edits in the **configuration.json** file are necessary.

"header" Section

In the "header" section, the name of the simulation bot can be defined in the line "**botnames**". For example:

- `"botnames": ["OE-US Bot"],`

```
"header":
{
    "target":
    {
        "botnames": ["OE-US Bot"],
        "botgroups": ["",""]
    }
},
```

"BotInfo" Section

In the line "**botNames**", please add the same bot name as used in the "header" section! For example:

- `"botNames": ["OE-US Bot"],`

```
"name": "BotInfo",
"action": "overwrite",
"entries": [{
    "name": "info",
    "content": {
        "botNames": ["OE-US Bot"],
```

"CoreInfo" Section

In the "CoreInfo" section, information about your Office 365 tenant, your Azure Active Directory application, your OfficeExpert application, and your TLS passwords have to be provided.

Enter the domain of your O365 tenant in the line "**tenant**". For example:

- `"tenant": "acme.onmicrosoft.com",`

Specify your Azure Active Directory application ID in the line "**appid**" (see "Azure Active Directory Application" on page 14 of the OfficeExpert Setup Requirements). For example:

- `"appid": "1ab23456-c7d8-9012-34e5-67f89012gh34",`

```
"name": "CoreInfo",
"action": "overwrite",
"entries": [{
    "name": "info",
    "content": {
        "debugLicensingEnabled": true,
        "tenant": "acme.onmicrosoft.com",
        "appId": "1ab23456-c7d8-9012-34e5-67f89012gh34",
```

Sub Section "kafkaConfig":

In the line "**bootstrap.servers**", please type in the FQDN of your OfficeExpert appliance (port 29092). For example:

- `"bootstrap.servers": "officeexpert.acme.com:29092",`

Please enter your TSL password in the lines "**sasl.password**" and "**ssl.key.password**" (the password you defined while running the setup script in the OfficeExpert appliance, see "Run Setup Script" on page 12). For example:

- `"sasl.password": "Your:Pa5$W0rD",`

- "ssl.key.password": "Your:Pa5$W0rD"

```
"kafkaConfig": {
        "acks": "all",
        "retries": 0,
        "bootstrap.servers": "officeexpert.acme.com:29092",
        "security.protocol": "SASL_SSL",
        "sasl.mechanisms": "PLAIN",
        "sasl.username": "panagenda",
        "sasl.password": "Your:Pa5$W0rD",
        "ssl.ca.location":
    "C:\\ProgramData\\panagenda\\OfficeExpert\\ca-cert",
        "ssl.certificate.location":
    "C:\\ProgramData\\panagenda\\OfficeExpert\\mc.pem",
        "ssl.key.location":
    "C:\\ProgramData\\panagenda\\OfficeExpert\\mc.key",
        "ssl.key.password": "Your:Pa5$W0rD"
```

Sub Section "zookeeperConfig":

In the line "**servers**", type in the FQDN of your OfficeExpert appliance (port 22181). For example:

- "bootstrap.servers": ["officeexpert.acme.com:22181"],

```
"zookeeperConfig": {
    "servers": "officeexpert.acme.com:22181",
    "username": "mcw",
    "password": "mcw",
    "configRootNode": "/as/oe/oes/config",
    "configNotificationNode": "/as/oe/oes/config_version",
    "licenseNode": "/as/license"
```

"authentication" Section

Running simulation bots requires that you provide certain authentication information. In the authentication section of the configuration.json you can choose between 4 different types of authentications.

- Basic Authentication
- ADFS / SSO Authentication
- Modern Authentication
- Certificate Based Authentication

Depending on which authentication mechanism you want to use, please configure the necessary subsection.

Basic Authentication:

Requires username and password:

```
"name": "authentication",
"action": "overwrite",
"entries": [{
    "name": "basic",
    "content": {
        "type": "basic",
        "username": "username@domain.com",
        "password": "User:Pa5$W0rD"
```

ADFS/SSO & Modern & Certificate Based Authentication:

Only the username is require.

Make sure that the simulation bot meets all requirements. Please refer to "Client Simulation Bots" on page 12 of the OfficeExpert Setup Requirements

Please adjust the lines "**name**" & "**type**" as follows:

- ADFS/SSO:

  "name": "**sso**",
  "content": {
      "type": "**sso**",

- Modern Authentication:

  "name": "**modern**",
  "content": {
      "type": "**modern**",

- Certificate Based Authentication:

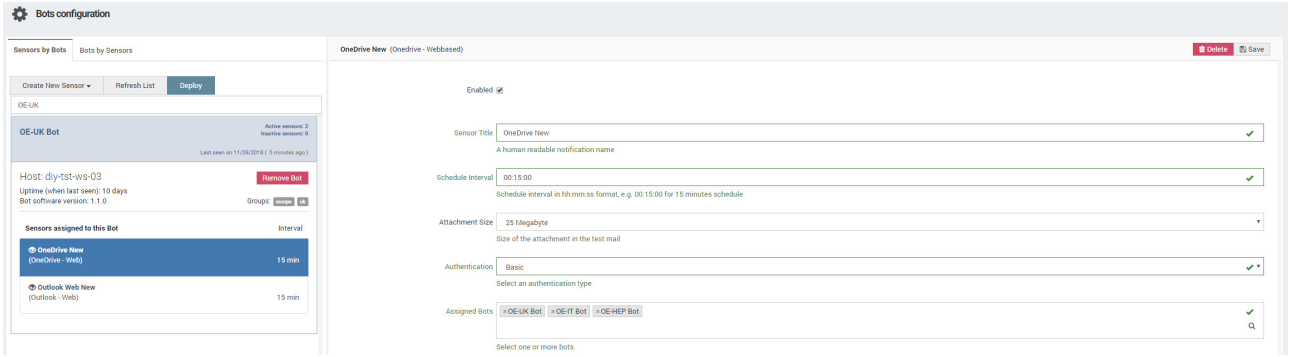
  "name": "**cba**",
  "content": {
      "type": "**cba**",

Example screenshot for ADFS/SSO authentication:

```
    "name": "sso",
    "content": {
        "type": "sso",
        "username": "username@domain.com"
```

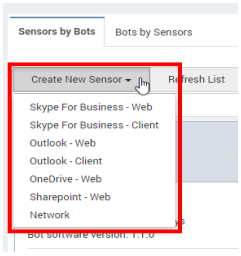
Manage Simulation Bots in User Interface

When the installation and configuration of a simulation bot is done, it sends heartbeat messages to the OfficeExpert appliance. In order to open the Bot Configuration view, click on the **Settings** button in the OfficeExpert user interface and select **Bots Settings.**

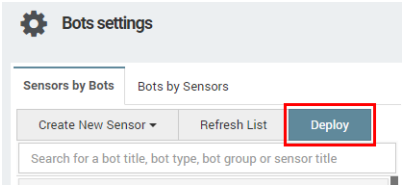


If the simulation bot is not listed in this view, please check its configuration (see "Configuration" on page 19) and whether the bot's system requirements are met (see "Client Simulation Bots" on page 12 of the OfficeExpert Setup Requirements & "Network & Firewall" on page 11 of the OfficeExpert Setup Requirements).

In the Bots Settings view, OfficeExpert **Sensors** can be created and assigned to the simulation bots.



When you are done with setting up your bots and Sensors, the Sensor configurations have to be deployed to the bots by hitting the **deploy button**:



Further details about bot and Sensor configuration can be found in the OfficeExpert knowledge base: https://www.panagenda.com/kbase/x/xILo.

Server Monitoring Settings

Configuring these settings enables OfficeExpert to retrieve pre-configured Windows Services and Performance Counters from the following server types:

- MS Exchange
- MS SharePoint
- Azure AD Connect Server
- Active Directory Federation Services

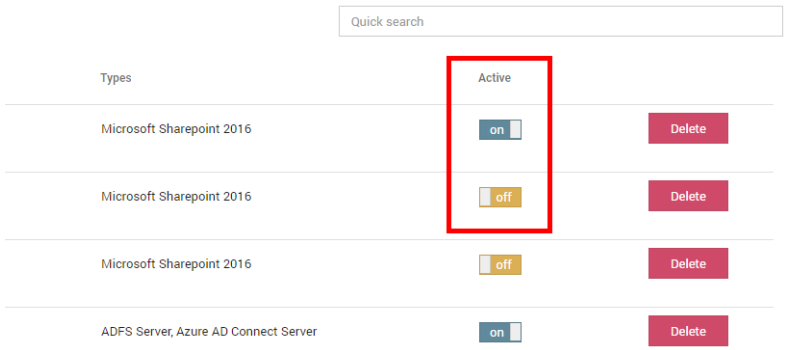
Server monitoring requires a Windows proxy! Please refer to "Windows Proxy Setup" on page 15 for further information.

Please click on **Settings > Server monitoring > Add new server** and enter

- the **Hostname (FQDN)**
- the **Remote PowerShell Port** - usually 5985 or 5986
- (if required **Use SSL** can be checked)
- select the **Server Type** - multiple types can be selected
- provide a **Username** and **Password**
  (or select a profile, if available - for details see www.panagenda.com/kbase/x/tlLo)

You can test your settings using the **Test Connection** button.

After **saving** the server it will appear in the list (**activated** per default):



Simulations

Azure Sync Simulations

When configured, it

- accesses the local AD server
- modifies the configured user object
- accesses the AD Connect server to read the sync cycle information
- accesses the Azure Cloud AD to check if the object was/was not synced

Click on the **Create new Azure Sync Simulation** and enter the following information:

- Name: Please enter a unique name for the simulation
- (Task Inactive: Tick this box if the simulation should NOT be active right after the creation)

- Active Directory Server:
  - **Hostname**: Enter hostname (FQDN) of the local AD server (used for the Azure AD Connect server - see Connect Server)
  - **Remote PowerShell Port**: Enter the remote PowerShell port (5985 or 5986 for SSL)
  - **Profile**: If an appropriate account profile is configured for these type of host, select it; for details on Profiles see www.panagenda.com/kbase/x/tILo
  - **Username** / **Password**: Enter username and password if no Profile can be used
  - Verify the connection and credentials by clicking on **Test Connection**

- Connect Server:
  Important: Make sure Remote PowerShell is configured on the Target Host (see www.panagenda.com/kbase/x/RIPo)
  - **Hostname**: Enter hostname (FQDN) of the Azure AD Connect server
  - **Remote PowerShell Port**: Enter the remote PowerShell port (5985 or 5986 for SSL)
  - **Profile**: If an appropriate account profile is configured for these type of host, select it; for details on Profiles see www.panagenda.com/kbase/x/tILo

- **Username** / **Password**: Enter username and password if no Profile can be used
- Verify the connection and credentials by clicking on **Test Connection**

- User Profile for accessing Azure AD:
  - **Profile**: If an appropriate account profile is configured for these type of host, select it; for details on Profiles see www.panagenda.com/kbase/x/tILo
  - **Username** / **Password**: Enter username and password if no Profile can be used

- Task Settings:
  - **AD Object (Email)**: Enter an email address (AD Userobject) which can be used for the simulation
  - **Cycle Count Threshold**: Specifying the number of cycles until the alert/notification should be triggered (alert has to be configured manually in the alert settings, see www.panagenda.com/kbase/x/6YLo)

Click the **Create** button to save your settings.

Mail Flow Simulations

With OfficeExpert you can monitor the mail flow duration between two mail systems. For instance you can monitor how long it takes for an email from Office365 towards Google Cloud.

Click on the **Create new Mail Flow Simulation** and enter the following information:

- Name: Please enter a unique name for the simulation
- (Task Inactive: Tick this box if the simulation should NOT be active right after the creation)

- SMTP (Sender):
  - **Mail Gateway**: This is the starting point of the Mail Flow Simulation; it can be ANY SMTP Server!
  - **Port**: Specify the SMTP Port (25, 587, etc.)

- **Authentication enabled**: Select this checkbox if authentication is necessary (with the sender Address)
- **StartTLS enabled**: Tick this checkbox if StartTLS is involved
- **Sender Address**: The email address which is used as a sender address (and optional for the authentication process)
- **Password**: Enter the password of the sender address account for authentication

- IMAP (Recipient):
  - **Server**: This is the endpoint of the Mail Flow Simulation; it can be ANY IMAP Server where the mailbox is IMAP enabled!
  - **Port**: Specify the SMTP Port (25, 587, etc.)
  - **SSL enabled**: Select this checkbox if SSL is used
  - **Recipient Address**: The email address which is used as recipient address
  - **Password**: Enter the password for the recipient address account

- Task Settings:
  - **Max. Number of Checks**: Maximal number of checks against the recipient mailbox within the Mail Cycle Timeout period (see below)
  - **Mail Cycle Timeout**: Maximal period of a mail cycle for this simulation
  - **Interval**: Period until a new mail cycle starts

Mail Flow Simulation Example:

If your simulation is set up as shown on the screenshot, every 10 minutes a new mail cycle will start. The recipient mailbox will be checked every minute, which results from Mail Cycle Timeout divided by Max. Number of Checks). If a mail is NOT delivered within 5 Minutes (Mail Cycle Timeout) the Mail Flow simulation fails.

ADDITIONAL INFORMATION

Further useful information on how to get and keep panagenda OfficeExpert up and running can be found in our knowledge base:
https://www.panagenda.com/kbase/display/OE/

Especially the following topics may be relevant:

- Integrate the OfficeExpert App into Microsoft Teams:
  https://www.panagenda.com/kbase/x/1gO0AQ
- Remote Appliance Access (VNC):
  https://www.panagenda.com/kbase/x/jA1wAQ
- SSL Certificate:
  https://www.panagenda.com/kbase/x/kw1wAQ
- Extending Disk Space:
  https://www.panagenda.com/kbase/x/lw1wAQ
- Customize Docker IP Settings:
  https://www.panagenda.com/kbase/x/rA1wAQ
- Metabase Default Users:
  https://www.panagenda.com/kbase/x/zQO0AQ

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