



Flexible Engine

File and Application Backup user guide

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Service Description

What is FAB?

File and Application Backup (FAB) is a Backup-as-a-Service (BaaS) platform designed for the protection of files and applicative components like databases (and in some cases, systems) located either within Flexible Engine, on your Premises, or in any other Cloud provider.

FAB is a [Flexible Engine](#) service based on the [Commvault](#) technology, Providing all the benefits brought by the Orange public Cloud solution, and the robustness and efficiency of the Commvault backup software.

Data is transferred in a secure way to the FAB platform via built-in tunnels and according to the required security configuration, allowing the possibility to use internal encryption at all stages of the data transfer: source / proxy / FAB Platform / Storage. Protected data is stored within the Flexible Engine Object Storage, offering the flexibility, security, and availability of the Orange Public Cloud platform.

As a managed service, FAB offers the automation of the backups, letting them run on standard global schedules for daily incremental backups, and through internal processes for Full backups, limiting your administrative tasks, and the interactions between FAB and your infrastructure to their strict minimum required.

FAB also offers the possibility to operate on-Demand backups and Restores as you see fit, and in a few clicks.

To process your files & applications protection, FAB uses agents to deploy on your infrastructure, and it exposes a centralized web console to administrate and follow up the backup and restore activity.

The FAB service is available in all Flexible Engine regions. These regions are used to determine where the FAB connection is to be made from your data to our Infrastructure, as well as the storage location of your backups.

The following regions are available:

- ★ [Eu-west-0 = Paris \(France\)](#)
- ★ [Eu-west-1 = Amsterdam \(Netherlands\)](#)
- ★ [Na-east-0 = Atlanta \(US\)](#)

Which elements can FAB protect ?

FAB relies on the Commvault technology to deliver the protection service ; however, a part of a public cloud solution, and therefore in order to offer a built-in and widely-used service, FAB cannot expose the Commvault product as is, and has to provide all the possible protection services in the context of such a public solution.

Currently the protection supported by the FAB support team is:

- ∞ Files and folders for Windows and Linux servers
- ∞ Microsoft Exchange infrastructure
- ∞ MSSQL databases
- ∞ Oracle databases
- ∞ VMware VMs

The FAB team works on releasing as many features as possible, with the only objective being to answer your needs in terms of data protection.

How to subscribe to and access the service?

As a Flexible Engine service, its subscription relies on the Flexible Engine subscription within the Orange Cloud portal “Cloud Store”.

You may find all required documentations on the Cloud Store and Flexible Engine here:

<https://cloud.orange-business.com/en/offers/infrastructure-iaas/public-cloud/assistance-flexible-engine/>

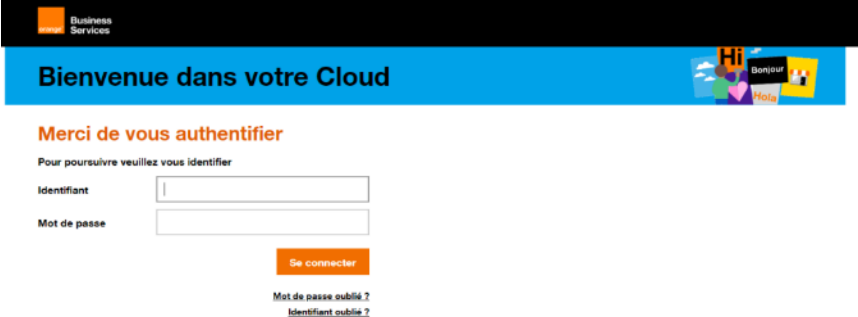
FAB Subscription

If you already have a Flexible Engine tenant...

1

Connect to the
OCB portal
“Cloudstore”

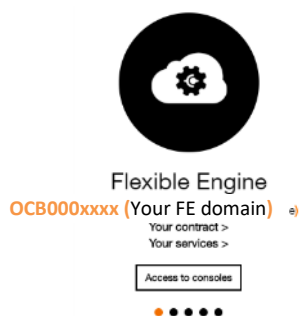
[https://selfcare.cloud.
orange-business.com/](https://selfcare.cloud.orange-business.com/)



Flexible Engine Domain manager credentials provided during the Flexible Engine subscription

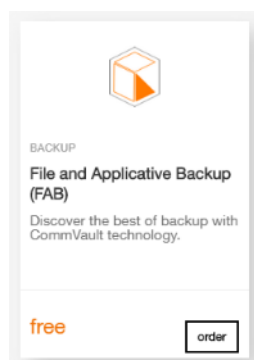
2

< > Select the Flexible Engine domain for which you wish to subscribe to FAB



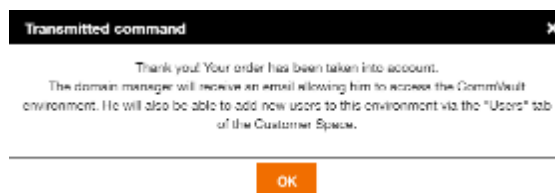
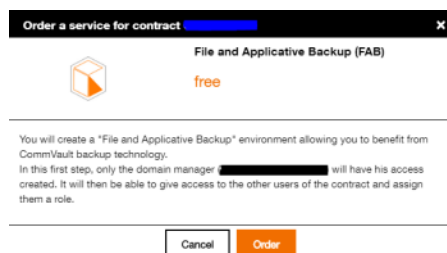
3

Locate the “File and Application Backup (FAB)” subscription panel and click on « **Order** »



4

Read the popup windows and continue to **create the access** to FAB for the Flexible Engine domain manager



To subscribe to Flexible Engine...

To subscribe to Flexible Engine, you may either:

- contact your OCB Business Manager,
- or subscribe digitally for a trial phase:

<https://cloud.orange-business.com/offres/infrastructure-iaas/tester-offre-flexible-engine/>

Access

FAB users are created in the OCB Cloudstore by your Flexible Engine domain manager, or any FE user with the “Users Manager” role.

To access the Service...

1

Connect to the
OCB portal
"Cloudstore"

[https://selfcare.cloud.
orange-business.com/](https://selfcare.cloud.orange-business.com/)

2

Select the
Flexible Engine domain
on which FAB was
subscribed

3

Click on "**Access**
to
consoles" and on
"Backup Console" in
the popup window

4

Click on "**Select
company**" to
access your Flexible
Engine FAB service

Bienvenue dans votre Cloud

Merci de vous authentifier

Pour poursuivre veuillez vous identifier

Identifiant

Mot de passe

Se connecter

Mot de passe oublié ?
Identifiant oublié ?

Flexible Engine
OCB000xxxxx (Your FE domain) :a
Your contract >
Your services >
Access to consoles

Technical consoles

Backup Console > **Technical Console** >

Cancel

Overview Dashboard

Environment

SERVICES	VMs	LAPTOPS	USERS
2	0	1	2

Needs attention

0	2
SERVICES	JOBs

SLA

0%

How to improve SLA

Jobs in the last 24 hours

2	0	0	0
RUNNING	SUCCESS	FAILED	EVENTS

Last week backup job summary

2

Top 5 largest servers

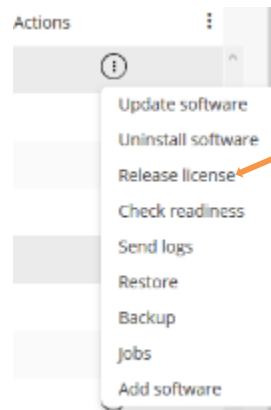
CLIENT	APPLICATION SIZE	LAST BACKUP TIME
Server name	Volume	Date & time

Service Closure

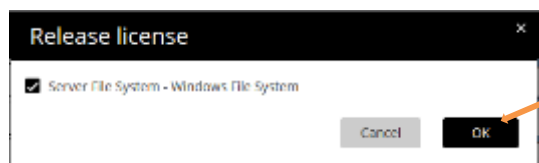
To end the FAB service, you must decommission each agent declared in your FAB organization.

To do so:

- Connect to the [FAB Backup Console](#), and go to the [Administration / Servers](#) section
- Then for each backed up client, click on its [Actions](#) button, and click on [Release license](#)



- Select all the agents installed and click on [OK](#) to decommission



Note: if you have a long retention set, it's recommended to open a ticket asking for your backups deletions

FAB Backup console description

FAB provides an html5 console to administrate your protection service.

Your FAB environment refers to your “Company” as the Flexible Engine domain to which it's related.

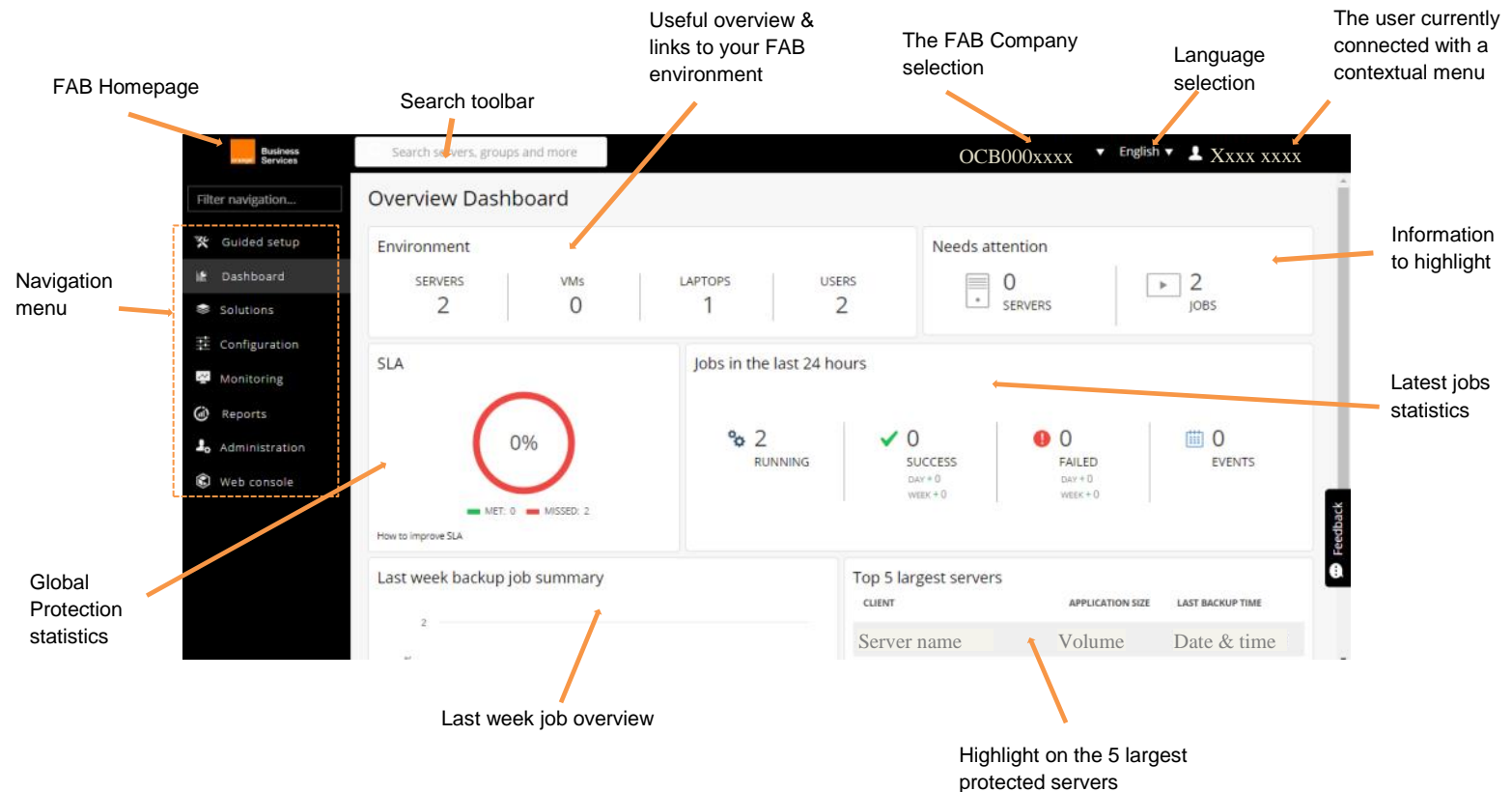
You may have as many FAB companies as you have subscribed for within your Flexible Engine domain.

The console is set in the following sections:

Dashboard

A Dashboard offering a global vision on your company's protection.

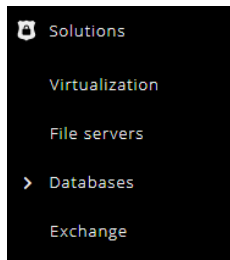
Remember to select your Company



Solutions

The “Solutions” section lists, by type, all the FAB agents you have installed for this FAB Company.

From there, various operations are available depending on the agent type:



For all agent types, the display is as follows:

Agent Type Type All Agents count		Search <input type="text" value="Search"/>		Options ⚙️	
Name ↑	Last backup time	Application size	Plan	Status	Actions
Agent name	Date & Time	Volume	Backup plan	Protected	⋮

Click on an agent to get further details

All operations available for this agent

- Restore
- Associate plan
- Backup
- Jobs
- Update software
- Uninstall software
- Release license
- Check readiness
- Send logs

Type	Last backup time	Application size	Plan	Backup content	Excluded	Actions
defaultBackupSet	Dec 23, 2019 1:39 AM	31.45 GB	PE-UNIVERSAL-Tokyo-PARS	1 - All contents	No exclude contents	⋮

Configuration section

The Configuration section provides general detail on the selected Company.

The selected Company

Protected elements

General configuration

Built-in profiles

Company primary contact

Plans associated to the selected Company

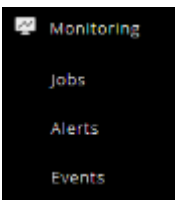
FAB Users for this Company

Exceptions configuration

♦User access is managed in the Cloud Store, not in FAB (see the Identity and Access Management section)

Monitoring

The Monitoring section provides vision on 3 sub sections built to help monitor the protection activity



Jobs

This section is split in 2:

Active jobs

Job history

Lists all currently active jobs in the selected Company

Lists previous jobs

Job ID	Operation	Server	Age...	SubC...	Server...	S...	Ind	Uap...	Status
xxxxxx	Auxiliary Copy					0 B	xxxxxx	1 sec	Completed

Alerts

Triggered alerts

Alerts definitions

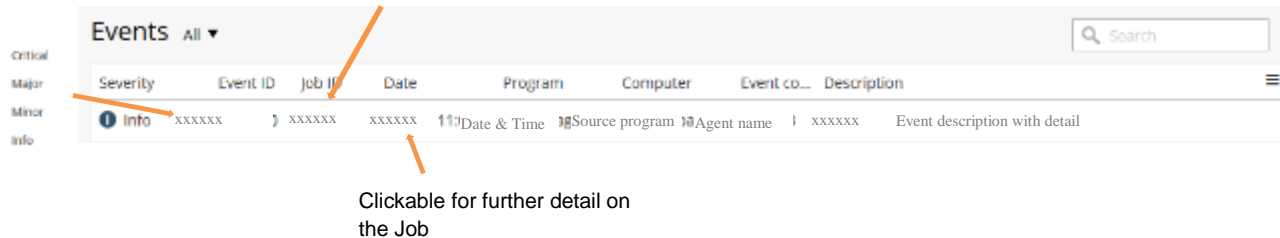
Define the alerts to enable

Lists all current alerts in the selected Company

Name	Type	Company	Enabled
Backup job failed	Data Protection	OCB0001743	OCB000XXXX
Backup job succeeded	Data Protection	OCB0001743	OCB000XXXX
Restore job failed	Data Recovery	OCB0001743	OCB000XXXX
Restore job succeeded	Data Recovery	OCB0001743	OCB000XXXX

Events





Clickable for further detail on the event



Severity	Event ID	Job ID	Date	Program	Computer	Event co...	Description
Info	xxxxxx	xxxxxx	xxxxxx	11/11/2017	Date & Time	1gSource program	1gAgent name xxxxxx Event description with detail

Clickable for further detail on the Job

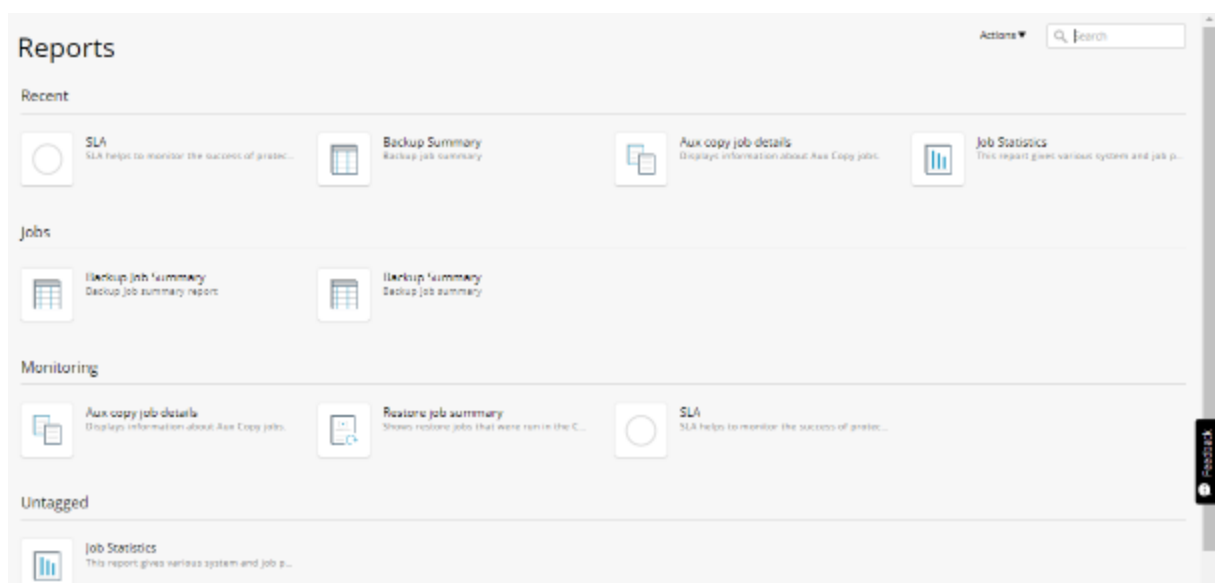
Events are displayed using the following severity matrix:

Severity	Icon	Description
Critical Event		Indicates critical system conditions affecting multiple clients or applications.
Major Event		Indicates a major error affecting a single client or application.
Minor Event		Indicates an unexpected event that does not affect running process.
Information Event		Indicates an expected event. It includes initiation and completion of jobs.

Each event ID is unique, one job = one event ID

Reports

You may find here all reports built on your protection activity:



Administration

This section is used to manage the protection of your devices (listing, configuration, installation, removal...).

The screenshot shows the 'Administration' menu with 'Servers' selected. The main content area displays the 'Servers' section with a table of server information. The table has columns: Name, Agent, Version, OS, Update status, and Actions. A dropdown menu is open for the 'Actions' column, showing options like 'Update software', 'Uninstall software', 'Release license', 'Check readiness', 'Send logs', 'Restore', 'Backup jobs', and 'Add software'.

Name	Agent	Version	OS	Update status	Actions
xxxxxx	Agent type	Agent version	OS version	Agent status	[Dropdown menu]

Web console / Download Center

The Download center is used to download all the FAB agent packages to install on your devices to initiate their protection.

List of available FAB agents (click for details)

The screenshot shows the 'Download Center' interface. On the left, there are filters for 'Version' (11 (15)), 'Category' (Organize), 'Add-on agents' (5), 'File System' (4), 'Platform' (Windows-x64, Linux-x64, Linux-x86, Windows-x86), and 'Status' (Active (15)). The main content area displays a list of available FAB agents with columns for Name, Release Date, Version, and Download button. The agents listed are VSA-Agent_LinuxX64, FS-Agent_LinuxX64, FS-Agent_WinX64, and FS-Agent_LinuxX86. An arrow points to the 'Download' button for the first agent, and another arrow points to the 'Download' button for the second agent.

Name	Release Date	Version	Download
VSA-Agent_LinuxX64	Jun 16, 2020 03:30:00 AM	Version: 11	[Download]
FS-Agent_LinuxX64	Jun 16, 2020 03:30:00 AM	Version: 11	[Download]
FS-Agent_WinX64	Jun 16, 2020 03:30:00 AM	Version: 11	[Download]
FS-Agent_LinuxX86	Jun 16, 2020 03:30:00 AM	Version: 11	[Download]

Identity & Access Management

Access management

The access to FAB is not managed within the FAB console but within the Cloud Store:

<https://selfcare.cloud.orange-business.com/>

Access is provided to a Cloud Store user, on each required Flexible Engine FAB Organizations.

Initially, only the Flexible Engine domain owner may provide accesses.

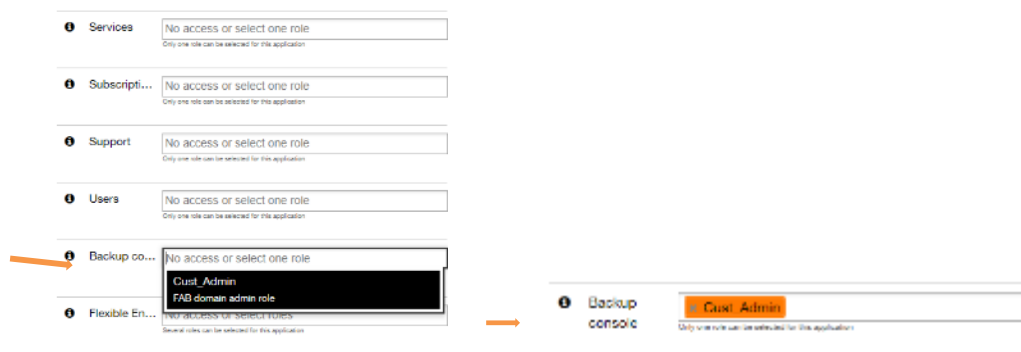
The domain owner has the possibility to delegate such access granting to users by assigning them the required role.

You will find here the Cloud Store documentation:

https://cloud.orange-business.com/wp-content/uploads/2019/09/CloudCustomerSpace_UserGuide_FEOffer-EN.pdf

The IAM is described in the chapter “Users section”.

In order to provide the access to FAB, the user must be granted the “Cust_Admin” profile within the Role assignment “Backup Console” as below:



FAB User profile description

The access to FAB has been built for Backup Operators.

Therefore all users granted access to FAB gain access to their Company (Flexible Engine domain) backup & restore configuration and operation, logged activities, notifications, as well as all reports built to monitor the Company protection.

FAB Deployment

FAB protection overview

There are 2 different models of FAB protection:

- Protection of servers files and databases: using preconfigured FAB agents to install on your servers to protect
- Protection of hyperscaler applications (like Office 365...): using specific configuration set directly in the Command center

The following chapter describes the standard agents deployment.

To understand better the hyperscaler applications protection deployment, please refer to chapter "Hyperscaler applications protection".

The agents manage the backup and restore activity locally on the device, and are configured to secure and transfer data to the FAB central environment for storage within the Flexible Engine Object Storage.

FAB Agents are preconfigured and packaged to facilitate their deployment in your infrastructure.

They are available for download from the Download Center (see the "Download center" section above).

Backups are processed automatically, as managed centrally and globally within FAB.

The Backups run every day between 8PM and 8AM French time (GMT +1).

The policy is to run incremental backups every weekday within this night time window and a full backup during the weekend, all day.

The FAB deployment is mainly a 2-step method:



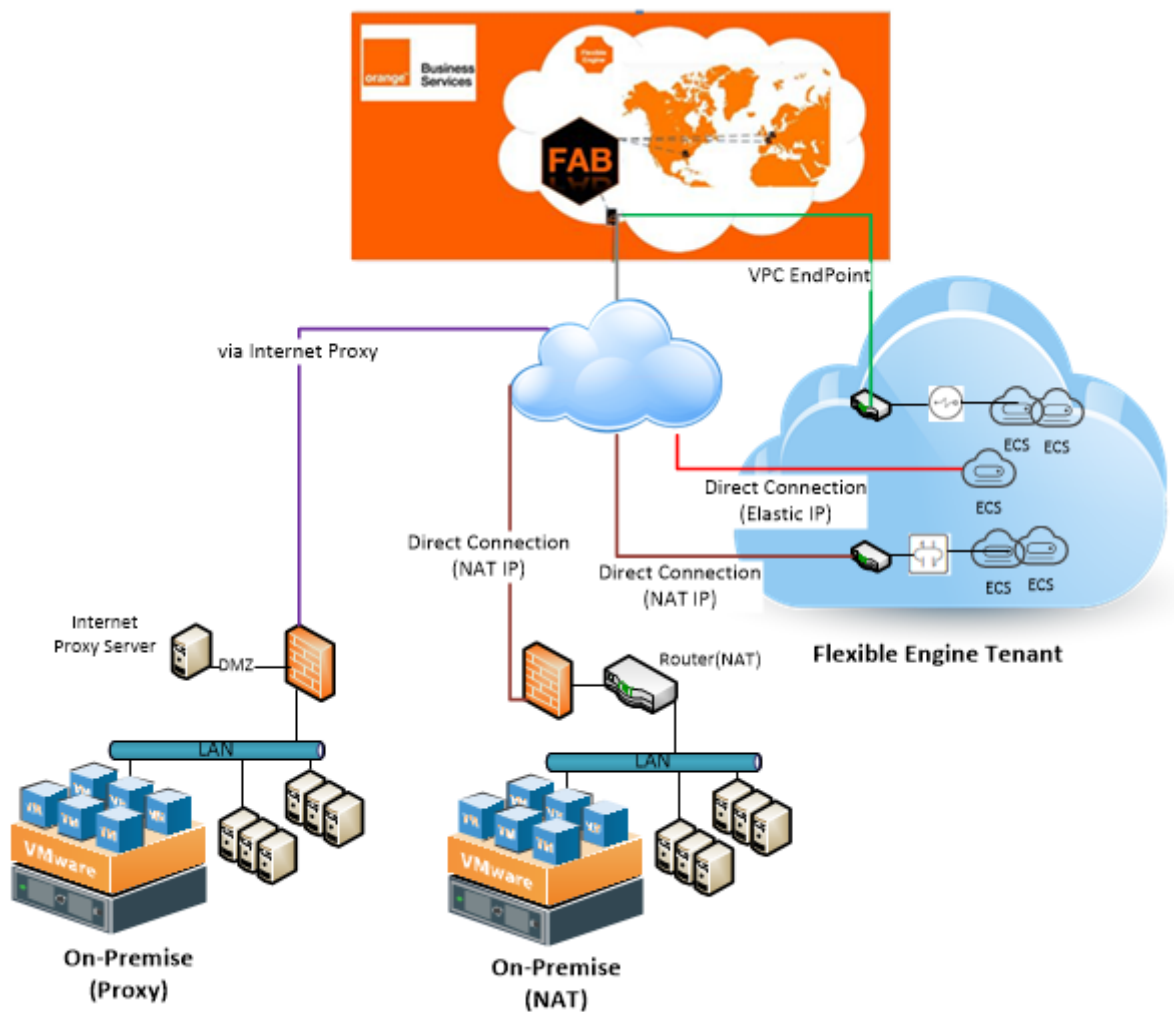
These two steps are described in detail in the following sections.

FAB Connection architecture models

Various possibilities are offered to setup the connection to the FAB service, depending on the network architecture in place in your company:

- **Direct Internet** : if your data to protect has a direct internet connection

- **Using an Internet Proxy (http proxy):** If your data to protect is not directly connected to the internet (behind an internet proxy like squid, ccproxy etc.). The agent setup offers you the possibility to inform the FAB agent of your http proxy configuration.
You may also want to refer to the [FAB Network Flow Diagram](#) section for the network opening settings in your company network
- **FAB Endpoint service :** If your data to protect is on Flexible Engine, FAB offers the possibility to use the VPC Endpoint service to connect to FAB, rather than using the internet connection (through Elastic IP or NAT Gateway) You may refer to the VPC Endpoint documentation [here](#) for a detailed explanation on this FE network service.



Logical representation of generic network deployment to connect to FAB regions using different methods

Creating FAB Endpoint connection

Note:

The FAB Endpoint service is currently available in [eu-west-0 region only](#).

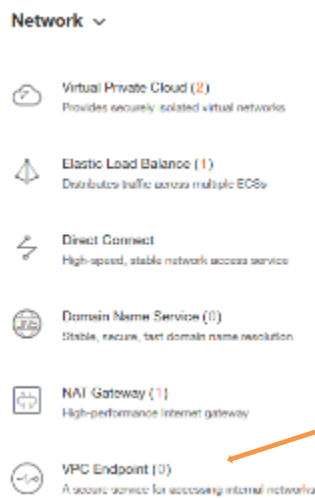
In order to provide the necessary redundancy on the FAB Endpoint connection method, it's required to build 1 Endpoint connection for each FAB Endpoint service :

FAB-EP-PARIS-A

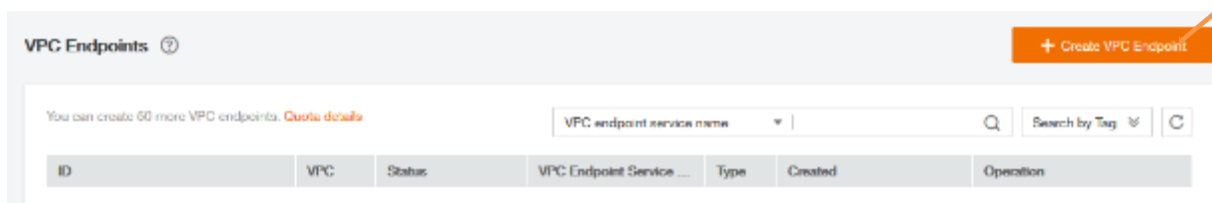
&

FAB-EP-PARIS-B

- To create an endpoint connection to FAB proxy servers, you need to logon to your domain [Flexible Engine console](#), to the [Network](#) section, and Click on [VPC Endpoint](#)



- On the VPC Endpoint page, Click [+Create VPC Endpoint](#)



- Click on [Find a service by name:](#)

Create VPC Endpoint

Region: eu-west-0

Regions are geographic areas isolated from each other. Resources are region-specific and cannot be resource access, select the nearest region.

Service Category: Cloud services (selected), Find a service by name (highlighted with orange arrow)

Service List:

Name	Owner
com.orange-business.prod-cloud-ocb.eu-west-0.obe-internet	OCB
com.orange-business.prod-cloud-ocb.eu-west-0.dns	OCB
com.orange-business.prod-cloud-ocb.eu-west-0.obe	OCB

Currently selected: com.orange-business.prod-cloud-ocb.eu-west-0.obe-internet

VPC: Test(10.200.200.0/24) View VPCs

Route Table: rtb-Test View route tables

- To assign FAB Proxy "FAB-EP-PARIS-A" a private IP Address from your subnet.
- Type in eu-west-0.FAB-EP-PARIS-A.de7ad2ef-8208-44a0-aad9-5d7699c6e413 in the VPC Endpoint Service name and click on [Verify](#):

Region: eu-west-0

Regions are geographic areas isolated from each other. Resources are reg and quick resource access, select the nearest region.

Service Category: Cloud services (selected), Find a service by name

VPC Endpoint Service Name: eu-west-0.FAB-EP-PARIS-A.de7ad2ef-8208-4 (Verify button highlighted with orange arrow)

VPC: vpc-demo-POC(10.10.0.0/16) View VPCs

Tag: It is recommended that you use TMS's predefined tag function to add the

Tag key: Tag value

You can add 10 more tags.

- Determine the VPC / Subnet containing the servers to protect (see figure below)
- Click on [Manual](#), then determine & assign an IP address for the FAB proxy (IP must be in your local subnet), click on [Verify](#), and then click on [Create Now](#).

Create VPC Endpoint ?

Region: eu-west-0

Regions are geographic areas isolated from each other. Resources are region-is select the nearest region.

★ Service Category: Cloud services [Find a service by name](#)

★ VPC Endpoint Service Name: eu-west-0.FAB-EP-PARIS-A.de7ad2ef-8208- [Verify](#) ?
 ✓ Service name found.

Private Domain Name: ☒ Create a Private Domain Name ?

★ VPC: 2 Test(10.200.200.0/24) [View VPCs](#)

★ Subnet: subnet-6feb(10.200.200.0/24) [View subnets](#)

★ Private IP Address: Automatic **Manual** 3
 10 · 200 · 200 · 1 [Verify](#)
 Available IP Address Range: 10.200.200.0/24 [View subnet details](#)

Access Control: ☐ ?

- To assign FAB Proxy “FAB-EP-PARIS-B” a private IP Address from your subnet.

1. Type eu-west-0.FAB-EP-PARIS-B.e5ad15ef-848a-47d4-9cc6-e4f31f2d0058 in the [VPC Endpoint Service name](#) and click on [Verify](#):

Region: eu-west-0

Regions are geographic areas isolated from each other. Resources are regic and quick resource access, select the nearest region.

★ Service Category: Cloud services [Find a service by name](#)

★ VPC Endpoint Service Name: eu-west-0.FAB-EP-PARIS-B.e5ad15ef-848a-4 [Verify](#) ?

★ VPC: vpc-demo-POC(10.10.0.0/16) [View VPCs](#)

Tag: It is recommended that you use TMS's predefined tag function to add the s:
 Tag key Tag value
 You can add 10 more tags.

- Determine the [VPC](#) / [Subnet](#) containing the servers to protect (see figure below)
- Click on [Manual](#), then determine & assign an [IP address](#) for the FAB proxy (IP must be in your local subnet), click on [Verify](#), and then click on [Create Now](#):

Create VPC Endpoint

Region: eu-west-0

Regions are geographic areas isolated from each other. Resources are region-specific. Select the nearest region.

Service Category: Cloud services [Find a service by name](#)

VPC Endpoint Service Name: eu-west-0.FAB-EP-PARIS-B.e5ad15ef-846a-4 [Verify](#) ⓘ

Service name found.

Private Domain Name: ☒ Create a Private Domain Name ⓘ

VPC: vpc-demo-POC(10.10.0.0/16) [View VPCs](#)

Subnet: subnet-back(10.10.1.0/24) [View subnets](#)

Private IP Address: Automatic **Manual** ⓘ

10 · 10 · 1 · 190 [Verify](#)

IP address available.

Available IP Address Range: 10.10.1.0/24 [View subnet details](#)

Note: Remember to take a note of the FAB proxy's local IP address you will define, as it will be asked during the installation of File system agents to protect using this connection (see the **File System Agent installation** section).

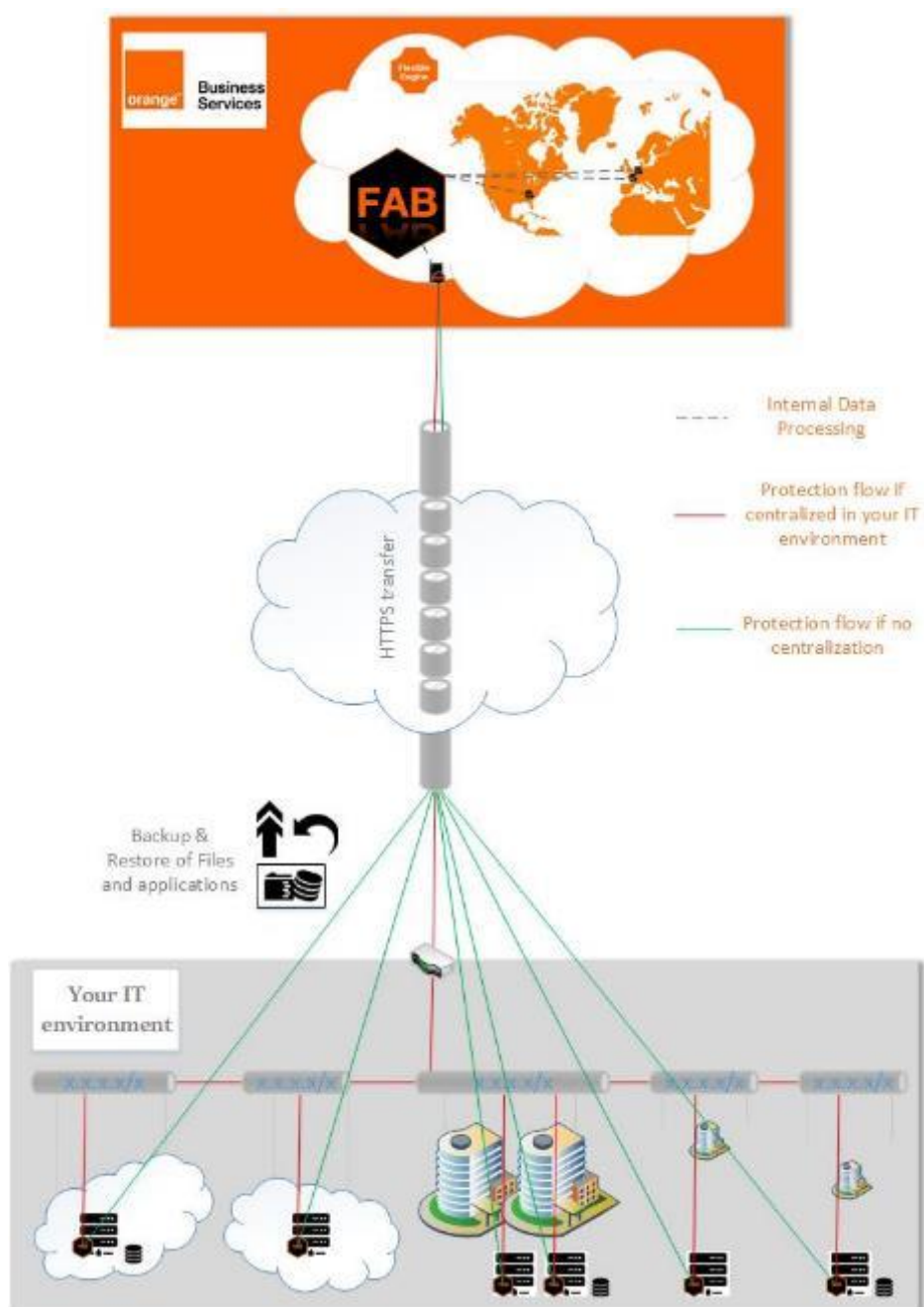
Deployment on your Premises

FAB provides the possibility to protect your On-Premise data.

The On-Prem agents contact directly the Central FAB infrastructure for backup and restore flows.

Therefore it's required to make sure they can access it.

The below diagram represents the data flow for the FAB service, depending on your infrastructure:



FAB Network Flow diagram

The flow diagram to open is the following:

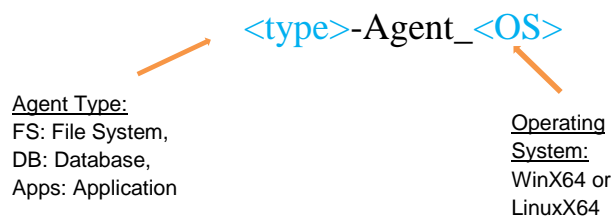
Source	IP	Destination	IP	Protocol	PORT
Your devices or your http proxy server	your IP Address(es)	backup-proxy-a.eu-west-0.prod-cloud-ocb.orange-business.com backup-proxy-b.eu-west-0.prod-cloud-ocb.orange-business.com	90.84.195.66 90.84.195.67	https	443

Note: You may choose whether to connect each agent directly to FAB, or to use an http proxy on your Premise. Either way, the corresponding network openings must be made on your source site to allow connections to FAB

Agents description

Various agents are packaged and made available within the Download Center (see the “Download center” section above). Each agent is packaged to answer a need you may have, and all agents are therefore available for you to deploy on your infrastructure to protect.

The agent name has been designed for you to understand its use case.
The naming convention is as follows:



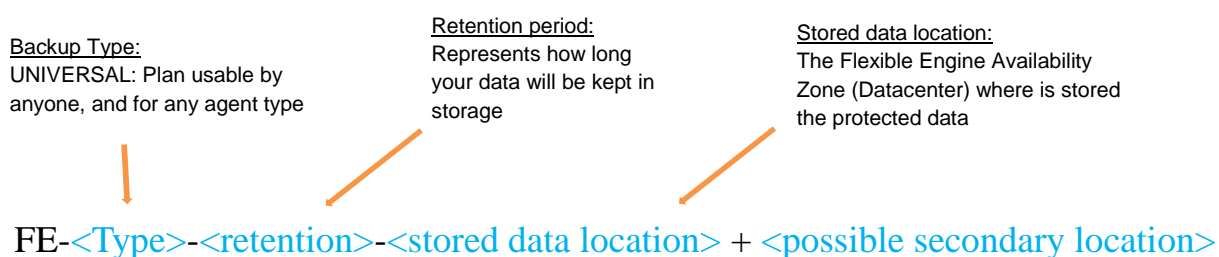
The “Apps” agent type is used to protect available applications like “Exchange”.

The FAB file system agents give the options to choose the Flexible Engine regions where FAB services are available. Your agent should connect to the most relevant zone depending on your geographical situation.

Note: You may click on a an agent to get further details

Backup Plans description

In order to cover as many cases as possible to protect your data, FAB provides a list of available Preconfigured Backup Plans. The Plans naming provides all required information to determine its use case:



To determine which Plan to use in which case, these are the questions you should be able to answer:

- 1- What type of data is to be protected?
 - [Backup Type](#)
- 2- Where do I want my protected data to be stored?
 - [Stored data location](#)
- 3- Do I need a secondary copy of the data, stored elsewhere?
 - [Possible secondary location](#)

Hyperscalers Applications protection

For now FAB offers the possibility to protect [Exchange online as part of the Microsoft 365 online product](#).

In order to protect your Exchange online environment, a specific method allows you to add the component directly from the Command Center. And for this type of protection, the agent is a built-in agent deployed directly on our FAB central environment and from the Command center. So there is no need to install any agent on your devices for such protection. The configuration is described in the FAB configuration chapter.

Once configured, FAB uses the predefined Hyperscaler's API and urls to connect to and protect the online environment, in order to store it on Flexible Engine Object storage for the retention of your choice.

Agent installation

The following section details the installation process for all types of available FAB agents:

Authorization code (authcode)

In order to authenticate the FAB agent with your FAB environment an authcode is necessary.

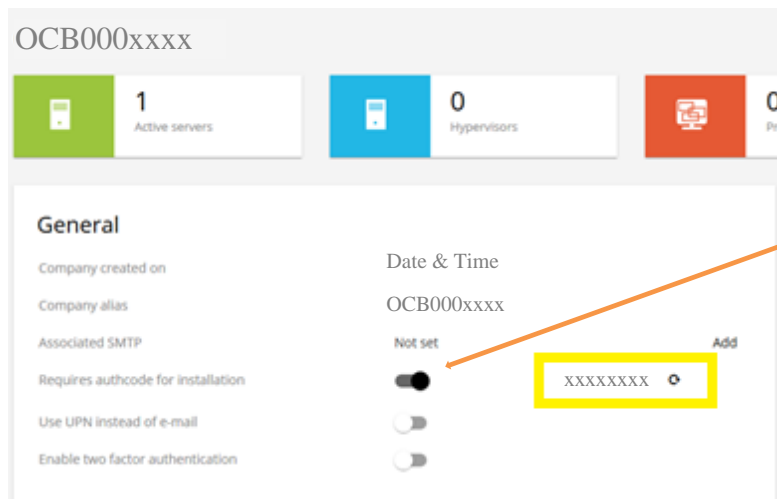
This authcode is an auto-generated key that allows connection of all required agents to the chosen FE/FAB Company.

To set up and copy an authcode on the selected Company...

- In the [FAB Backup console](#), go to [Configuration/Companies](#).
- Then, in the "General" frame, make sure the option "[Requires authcode for installation](#)" is enabled, or click on the button to enable it (note that this option is by default disabled):



- The code will be generated automatically, [Copy it](#) for a later use by clicking on the authcode directly:



In this case, the option is presently enabled

Note: this authcode can be modified at any time by clicking the  icon

File System Agent installation

Windows server agent installation

Prerequisites:

- The required agent package (corresponding to the server OS and to your need) has been downloaded from the download Center
- This downloaded agent package has been transferred to the server to protect
- The server to protect is able to communicate with the FAB central infrastructure on https (port 443)
- An authcode has been generated for the required FE/FAB Company (see above "authcode" section)

- [Download package](#) from the Download center, the File System Agent based upon the Windows operating system architecture type (32 bit or 64 bit):

Download Center

Reset filters

Version

11 (2)

Category [Organize]

File System (2) X

Platform

Windows-x64 (1)

Windows-x86 (1)

Status

Active (2)

Search



FS-Agent_WinX64

Release Date: Jun 16, 2020 03:30:00 AM | Version: 11

Description: Windows Install package for FAB File System agent for all pour toutes les région...

Edit

Delete



FS-Agent_WinX86

Release Date: Jun 16, 2020 03:30:00 AM | Version: 11

Description: Windows X86 Install package for FAB File System agent Windows X86 pour toutes les région...

Edit

Delete

- Unzip the package onto the server to protect:

This PC > SYSTEM (C:) > Temp > FS_WinX64 >

Name	Date modified	Type	Size
BinaryPayload	6/11/2020 6:30 AM	File folder	
Common	6/11/2020 6:30 AM	File folder	
ThirdParty	6/11/2020 6:30 AM	File folder	
BinaryInfo	6/11/2020 6:30 AM	XML Document	3,109 KB
BinaryInfo.xml.description	6/11/2020 6:30 AM	DESCRIPTION File	1 KB
BrandList	6/11/2020 6:30 AM	Text Document	1 KB
cv7x	6/11/2020 6:30 AM	Application	961 KB
install	6/11/2020 6:30 AM	XML Document	5 KB
installer	6/11/2020 6:30 AM	Windows PowerS...	6 KB
LaunchInstaller	6/11/2020 6:30 AM	Application	189 KB
QInstaller	6/11/2020 6:30 AM	Application	174 KB
RootFilesSummary	6/11/2020 6:30 AM	XML Document	1 KB
Setup	6/11/2020 6:30 AM	Application	17,374 KB
version	6/11/2020 6:30 AM	Text Document	1 KB
WinPackages	6/11/2020 6:30 AM	XML Document	71 KB

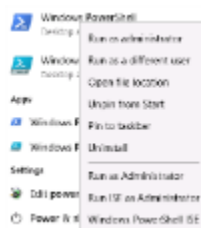
- Right click the PowerShell [installer](#) script and on the properties page click / select [Unblock](#) (depending on OS version)

Note: Windows security policy might block the ps1 or .exe file execution.

In that case, [right click](#) the [install.bat](#), go to [properties](#) and select [unblock](#)



- Open "PowerShell" as Administrator



- Change to the directory where the package was extracted, and execute the [installer.ps1](#)
- You will be asked below questions:

- FAB region to use: (Paris – Eu-west-0, Amsterdam – Eu-west-1 or Atlanta – Na-east-0) - This selection decides in which FAB region the backup is stored for your server, it's important that the nearest geographical FAB region to your server be chosen else backup performance is impacted.
- Connection method to FAB region: (Internet Proxy, FE Endpoint services or Direct (Elastic IP / NAT) and provide input - This selection decides how your server connects to FAB regions based upon the network defined on the server. See section [FAB connection architecture models](#) for details.
- Company Auth. Code

```
PS C:\Users\Administrator> cd C:\Temp\F5_WinX64_Windows-x64
PS C:\Temp\F5_WinX64_Windows-x64> .\installer.ps1
Which FAB region you want to use for Backup - Eu-west-0(P), Eu-west-1(A) or Na-east-0(N)? (P/A/N): p
Choose your connection method (please check the FAB user guide for detail) :
Internet Proxy (your local http proxy) (I)
FAB Endpoint Services (the VPC Endpoint feature available for Flexible Engine) (E)
Direct access (if your backed up element is connected to the internet directly) (D)
Choose your option I/E/D ?: d
Please enter your Auth Code:: 50063EBB0
Installation completed with success
Press Enter to continue...: 
```

Cloud location: The FE/FAB AZ to which protected data will be transferred.




To be chosen with care, as this may impact degraded network performances if not

The installation completes after several minutes

```
Please enter your Auth Code:: 
Installation completed with success
Press Enter to continue...: 
PS C:\temp\F5_WinX64> 
```

For details on FAB region and Connection method refer to section: [Service Description and FAB protection overview](#)

- Ensure that [Commvault Services](#) are running in Windows:

	Commvault Client Manager Service (Instance001)	This service ...	Running	Automatic
	Commvault Communications Service (Instance001)	This service ...	Running	Automatic
	Commvault Network Daemon (Instance001)	This service ...	Running	Automatic

- Ensure that your server is discovered in the [FAB Backup console](#):

Go to the [Administration / Servers](#) section:

Servers							Search	Add server	
Name	Agent		Versl...	OS	Updat...	Actio...			
Server name	Agent	Operating System	Agent status						

If the server is not visible then press **cntrl + F5** together, it would clear the local cache and present latest data

Linux server agent installation

Prerequisites:

- The required agent package (corresponding to the server OS and to your need) has been downloaded from the download Center
- This downloaded agent package has been transferred to the server to protect
- The server to protect is able to communicate with the FAB central infrastructure on https (port 443)
- An authcode has been generated for the required FE/FAB Company (see above "authcode" section)

- [Download package](#) from the Download center, the File System Agent based upon the Linux operating system architecture type (32 bit or 64 bit):

Download Center

Reset filters

Version

11 (2)

Category [\[Organize\]](#)

File System (2) X


Platform


Linux-x86 (1)

Linux-x64 (1)

Status

Active (2)

**FS-Agent_LinuxX64**
Release Date: Jun 16, 2020 03:30:00 AM | Version: 11
Description: Linux Install package for FAB File System agent for all regions toutes les régions...
[Edit](#) [Delete](#)

**FS-Agent_LinuxX86**
Release Date: Jun 16, 2020 03:30:00 AM | Version: 11
Description: Linux X86 Install package for FAB File System agent for all regions pour toutes les régions...
[Edit](#) [Delete](#)

- Extract the package on to the server

```
[root@ecs-ams-01-rhel software]# ls
FS_Linux-x64.tar.gz
[root@ecs-ams-01-rhel software]# tar -xzf FS_Linux-x64.tar.gz
```

- Run installer script ([installer.sh](#)) and choose the install options (to install or generate answer file).
- Choosing [install option](#) (1) would ask for below options and install the agent.
- FAB region to use: (Paris – Eu-west-0, Amsterdam – Eu-west-1 or Atlanta – Na-east-0) - This selection decides in which FAB region the backup is stored for your server, it's important that the nearest geographical FAB region to your server be chosen else backup performance is impacted.
- Connection method to FAB region: (Internet Proxy, FE Endpoint services or Direct (Elastic IP / NAT) and provide input - This selection decides how your server connects to FAB regions based upon the network defined on the server. See section [FAB connection architecture models](#) for details.
- Company Auth. Code

```
[root@ecs-atl-01-rhel FS_Linux]# ./installer.sh
Choose an option:
1) Install FAB Linux Filesystem Agent
2) Generate answerfile for multiple client installation
3) Quit
#? 1
Choose FAB region for configuring Backup:
1) FAB Paris region / Eu-West-0
2) FAB Amsterdam region / Eu-West-1
3) FAB Atlanta region / Na-East-0
#? 3
Choose an connection method:
1) Server use Internet Proxy for backup to FAB region
2) Server use FE Endpoint service for backup to FAB region
3) Server have Public IP or Direct internet for backup to FAB region
#? 3
Please enter your Auth Code:
Using update installer /opt/.gxsetup/silent_install/newinstall:
- unzipped from /software/FS_Linux/linux-x8664/LooseUpdates/CUS5/linux-
- v1182174
Preparing .. READY.

EXTRACT DIR = /opt/.gxsetup/silent_install
Installation completed with success
[root@ecs-atl-01-rhel FS_Linux]#
```

Cloud location: The FE/FAB region to which protected data will be transferred.

To be chosen with care, as this may impact degraded network performances

Installation lasts around 3 to 4 minutes if the FW configuration is OK

- If you want to install agent on multiple servers in the same region using same connection method and don't want to execute this script on each server then. Choose [option 2](#) at the first menu.
- It would ask all the options as asked in option 1 (mentioned above) but won't install the agent rather it would be generate the silent xml file ([rename-default.xml](#)) which need to be renamed as default.xml and existing default.xml be over-written by this new file.

```
[root@ecs-atl-01-rhel FS_Linux]# ./installer.sh
Choose an option:
1) Install FAB Linux Filesystem Agent
2) Generate answerfile for multiple client installation
3) Quit
```

- Then extracted package along with this xml file needs to be copied to all servers and then installed via the below command.

`./silent_install -p default.xml -authcode <your Auth Code>`

- Ensure that your server is discovered in the [FAB Backup console](#):

Go to the [Administration / Servers](#) section

Servers						Search	Add server	
Name	Agent	Versi...	OS	Updat...	Actio...			

If the server is not visible then press **cntrl + F5** together, it would clear the local cache and present latest data

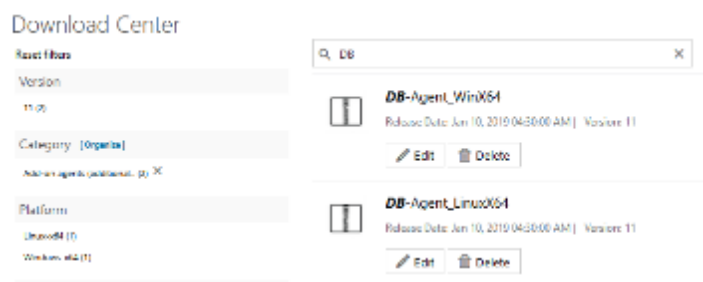
DB Agent installation

Oracle agent installation

Prerequisites:

- The FAB DB-Agent package has been downloaded from the Download Center
- This downloaded agent package has been transferred to the Oracle server to protect
- The FAB File System agent has been installed on the Oracle server to protect
- The Oracle server to protect is able to communicate with the FAB central infrastructure on https (port 443)
- An authcode has been generated for the required FE/FAB Company (see the "Authorization code" section)
- You have administrator / root privileges on the Oracle Server to protect

- Download the package from the [Download center](#) to the Oracle server to protect:



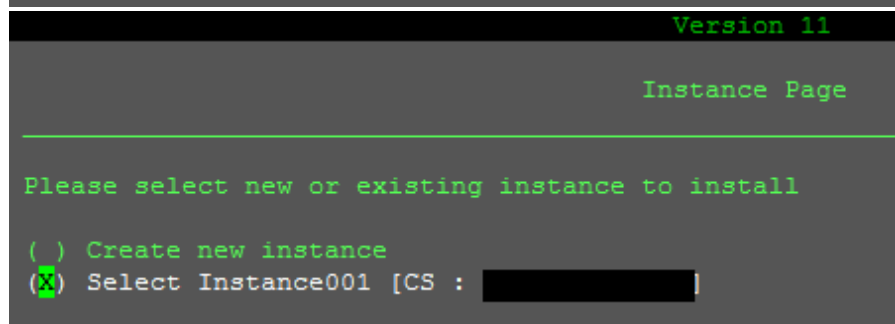
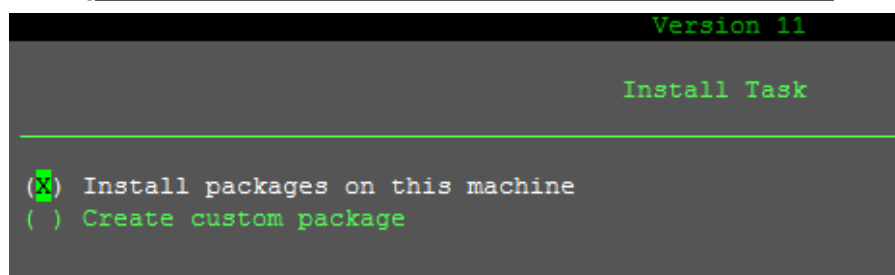
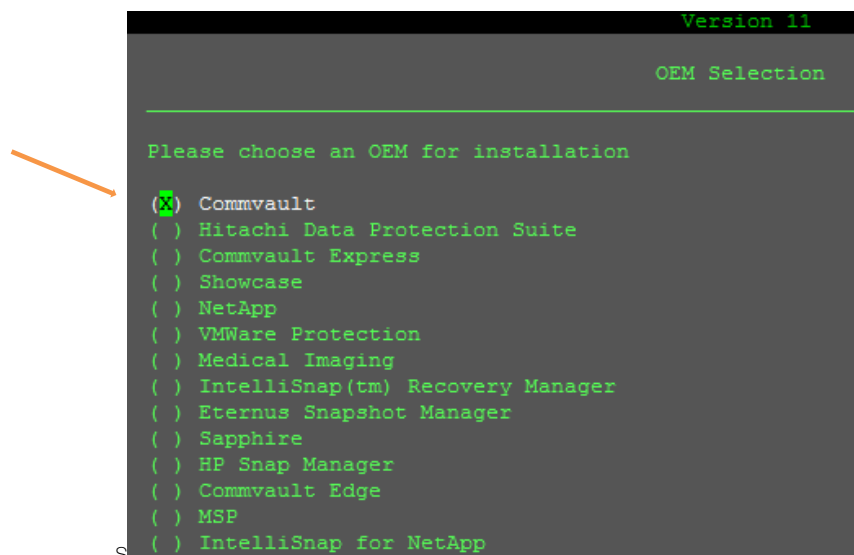
- Unzip / Decompress the package onto the Oracle server to protect:

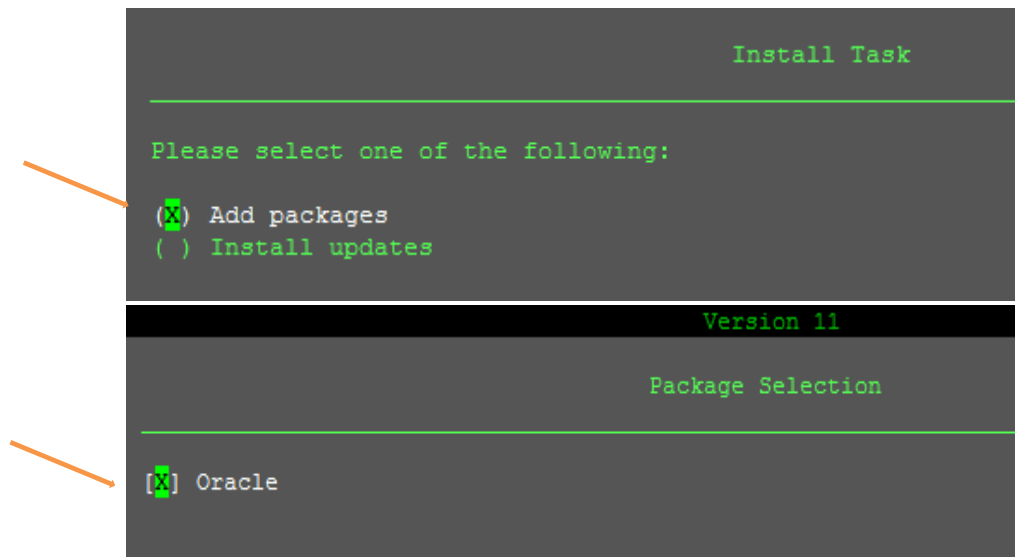
```
[root@ecs-oracle-01 /]# cd /software
[root@ecs-oracle-01 software]# mkdir ORACLE
[root@ecs-oracle-01 software]# tar -C ./ORACLE -xzf Oracle_Linux-x64.tar.gz
./
./linux-x8664/
./linux-x8664/linux-glibc2.3-x86_64/
```

- Run the install by executing the `./cvpkgadd`

```
[root@ecs-oracle-01 software]# cd ORACLE
[root@ecs-oracle-01 ORACLE]# ls -lt
total 204
-rw-r--r--. 1 root root 1702 Jun 11 05:34 default.xml
-rwxrwxrwx. 1 root root 2769 Jun 11 05:34 pkg.xml
-rw-r--r--. 1 root root 10 Jun 11 05:34 pkg.xml.description
drwxr-xr-x. 11 root root 4096 Jun 11 05:34 linux-x8664
-rwxrwxrwx. 1 root root 103812 Jun 10 03:28 rompkg.xml
-rwxrwxrwx. 1 root root 52 Jun 10 03:28 support
-rwxrwxrwx. 1 root root 132 Jun 10 03:27 cvpkgadd
-rwxrwxrwx. 1 root root 63394 Jun 10 03:27 detect
-rwxrwxrwx. 1 root root 132 Jun 10 03:27 silent_install
-rwxrwxrwx. 1 root root 119 Jun 10 03:27 version
-rwxrwxrwx. 1 root root 52 Jun 10 03:27 cvpkgseed
[root@ecs-oracle-01 ORACLE]# ./cvpkgadd
Using update installer /root/.gxsetup/cvpkgadd/newinstall:
- unzipped from /software/ORACLE/linux-x8664/LooseUpdates/CU55/linux-glibc2.3-x86_64/installer/newinstall.gz
- v1182174
Preparing .. READY.
EXTRACT_DIR = /root/.gxsetup/cvpkgadd
```

- Follow the [instructions](#) in the setup, choose the options exactly as selected below:





- The installation completes after several minutes.



- To relink the Oracle SBT Library:

Change to oracle agent install location, execute the `Ora_install.sh` script then provide all inputs:
Oracle user, user group has to be `oinstall`, Oracle Home directory and user home directory

```
[root@ecs-oracle-01 ~]# cd /opt/commvault/iDataAgent
[root@ecs-oracle-01 iDataAgent]# ./Ora_install.sh
Please enter ORACLE_USER ID: oracle
Please enter user group for oracle [dba]: oinstall
Please enter ORACLE_HOME directory: /u01/app/oracle/product/12.2/db_1
Please enter the home directory of user oracle [~oracle]: /home/oracle
Would you like to relink $PRODUCT with different ORACLE_HOME now(y/[n])?n
```

- Verify the Oracle SBT Library is correctly linked:

```
ls -l /u01/app/oracle/product/12.2/db_1/lib/libobk.so
May 15 04:33 /u01/app/oracle/product/12.2/db_1/lib/libobk.so -> /opt/commvault/Base/libobk.so
```

- Modify the permission for the group `oinstall` by executing `/opt/commvault/Base/cvpkgchg`:

```
[root@ecs-oracle-01 iDataAgent]# cd /opt/commvault/Base
[root@ecs-oracle-01 Base]# ./cvpkgchg

~~~ Instance001 11.0.0 @/opt/commvault ~~~

Using installer /opt/commvault/installer/newinstall:
- v1182174
Preparing .. READY.

EXTRACT_DIR = /opt/.gxsetup/cvpkgchg
```

Version 11

Unix Group Selection

Please enter the name of the group which will be assigned to all Commvault files and on behalf of which all Commvault processes will run.

In most of the cases, it is a good idea to create a dedicated "commvault" group. However, if you are planning to use Oracle iDataAgent or SAP Agent, you should enter Oracle's "oinstall" group here.

If you are planning to assign a group other than "root", and planning to use the "impersonate user" option during restore, then all such impersonating users must be a part of this user group.

Unix Group Name: oinstall

Version 11

Permission Details

The installer assigns full access permissions to root user for all Commvault files and processes.

For group and any other users, you can set access permissions during this step. If you did not assign a dedicated group, and if you plan to use agents that involve third-party software protection (such as Oracle), you must specify sufficient access rights for other users.

☒ Allow read permission to group users
☒ Allow write permission to group users
☒ Allow execute permission to group users
☒ Allow read permission to other users
☐ Allow write permission to other users
☒ Allow execute permission to other users

Version 11

Change Group/Permissions Status

Successfully changed the group/access permissions.

➤ Verify the agent installation by running `commvault status`

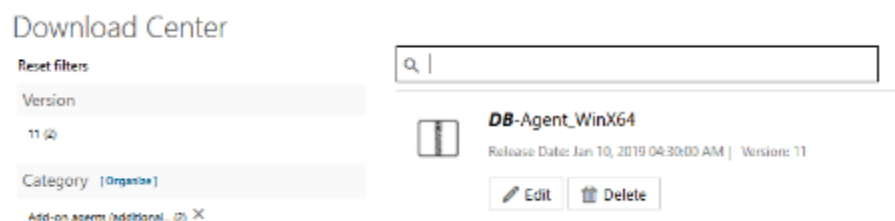

```
[root@ecs-oracle-01 iDataAgent]# commvault status
----- Instance001 -----
[ General ]
Version = 11(BUILD80) SP16 (2046897) HPK55 (28May)
CommServe = 
Home Directory = /opt/commvault/Base
Log Directory = /var/log/commvault/Log_Files
Core Directory = /opt/commvault
Temp Directory = /opt/commvault/Base/Temp
Platform Type = 4
Cvd Port Number = 8400
[ Package ]
1002/CVGxBase 11(BUILD80) = File System Core
1204/CVGxOrIDA = Oracle iDataAgent
[ Physical Machine/Cluster Groups ]
Display Name = ecs-oracle-01
- Client Hostname = ecs-oracle-01.novalocal
- Job Results Directory = /opt/commvault/iDataAgent/jobResults
```

MS SQL server agent installation

Prerequisites:

- The required agent package (corresponding to your need) has been downloaded from the download Center
- This downloaded agent package has been transferred to the SQL server to protect
- The SQL server to protect is able to communicate with the FAB central infrastructure on https (port 443)
- An authcode has been generated for the required FE/FAB Company (see above "authcode" section)
- You have administrator privileges on the SQL Server to protect

- [Download package](#) from the Download center to your MSSQL server



- [Unzip the package](#) onto the SQL server to protect:

is PC > SYSTEM (C:) > Temp > DB-Agent_WinX64

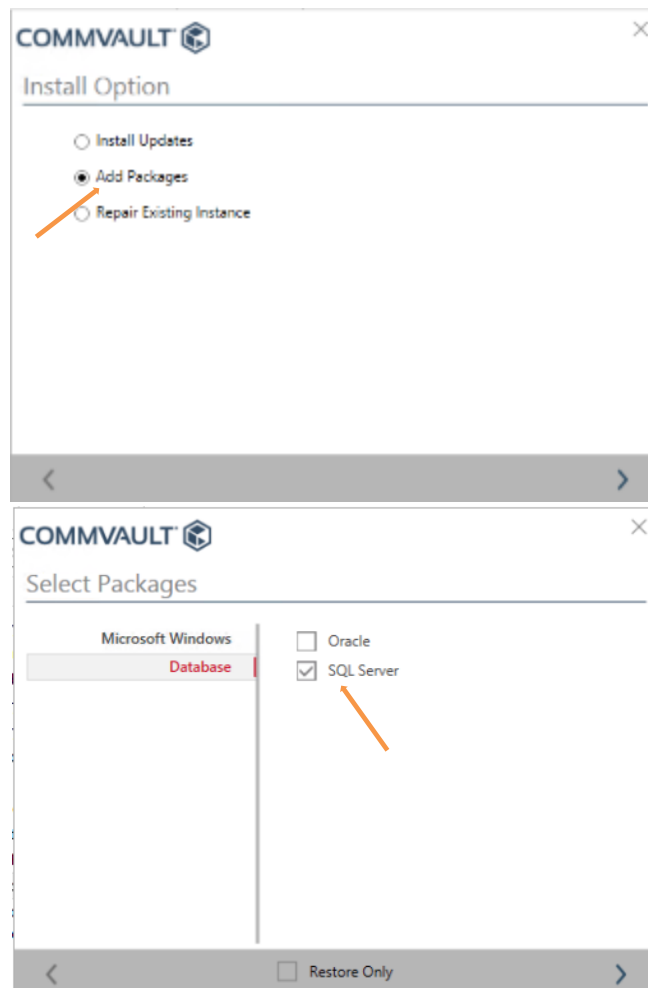
Name	Date modified	Type	Size
BinaryPayload	3/5/2020 6:36 AM	File folder	
Common	3/5/2020 6:36 AM	File folder	
Global	3/5/2020 6:36 AM	File folder	
ThirdParty	3/5/2020 6:36 AM	File folder	
BinaryInfo	3/4/2020 5:19 AM	XML Document	3,199 KB
BinaryInfo.xml.description	3/4/2020 5:19 AM	DESCRIPTION File	1 KB
Brandlist	3/4/2020 5:19 AM	Text Document	1 KB
cv7z	3/4/2020 5:19 AM	Application	961 KB
LaunchInstaller	3/4/2020 5:19 AM	Application	189 KB
Qinstaller	3/4/2020 5:19 AM	Application	174 KB
RootFilesSummary	3/4/2020 5:19 AM	XML Document	1 KB
Setup	2/7/2020 7:01 PM	Application	17,374 KB
version	3/4/2020 5:19 AM	Text Document	1 KB
WinPackages	3/4/2020 5:19 AM	XML Document	71 KB

- Run the install by double clicking on the “Setup.exe”

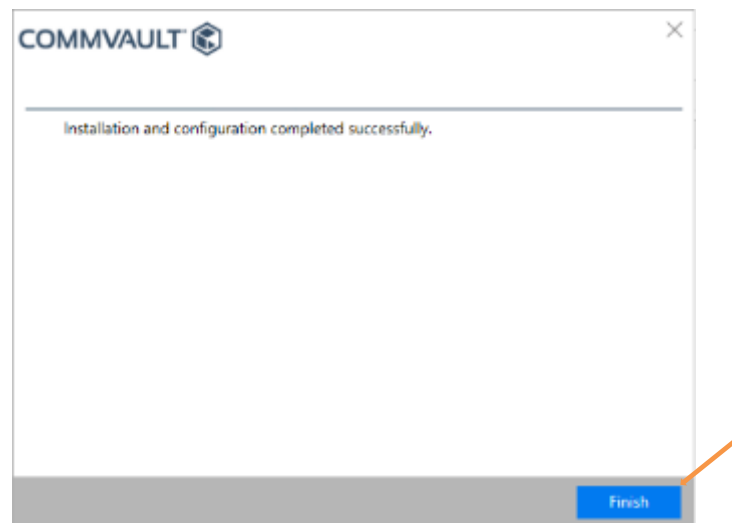
Note: Some OS security policy might block the batch or .exe file.
In that case, [right click](#) the Setup.exe, go to [properties](#) and select [unblock](#)



- Follow the instructions in the installer according to your need, select the “[add packages](#)” and “Database / [SQL Server](#)” options:



- The installation completes after several minutes, click on “Finish”



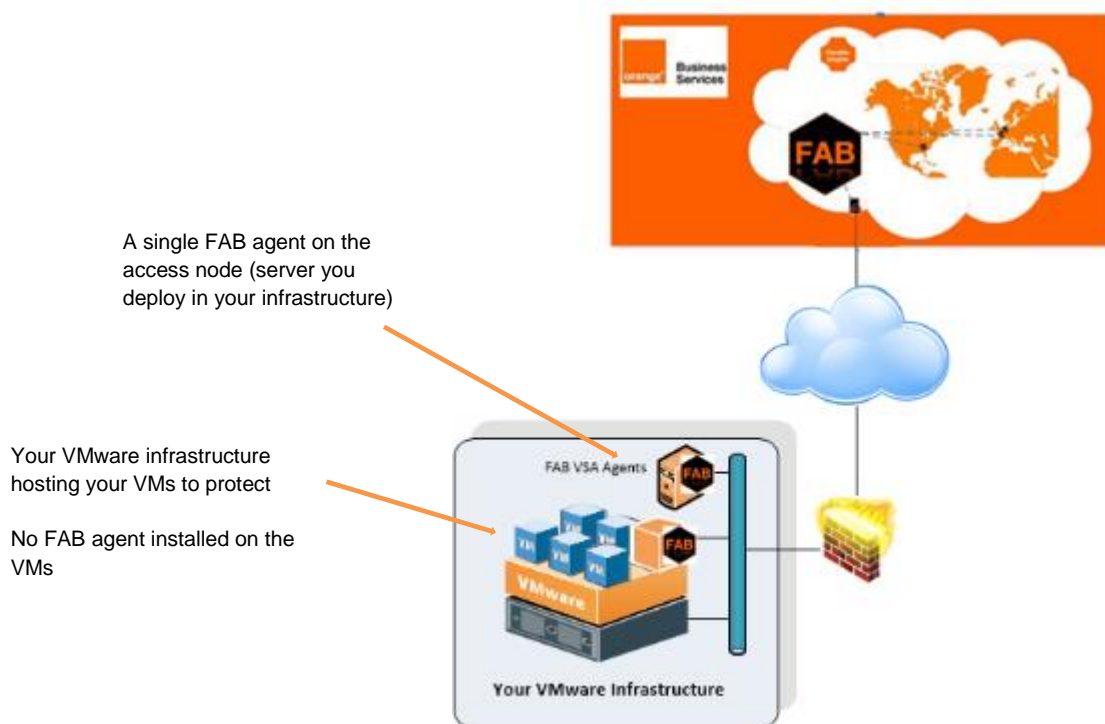
VSA (Virtual Server Agent) installation

Virtual Server Agent (VSA) manages backups and restores for virtual machines or instances. The VSA is installed on computers that can perform backup and restore operations for a specific hypervisor platform.

The VSA supports different hypervisors (currently only VMware is supported in FAB), providing custom views and parameters for each hypervisor.

The server running the FAB VSA agent is called an Access Node ; and it needs to be deployed either within the VMware Infrastructure as a VM or on a physical server inside your Infrastructure, able to communicate with the vCenter and ESXi servers.

Such can be represented as follows:



VSA Prerequisites:

- The VSA agent package has been downloaded and transferred to the server that would act as access node for VM backup (see the web console section)
- An authcode has been generated for the required FE/FAB Company (see above "authcode" section)
- You have a user account with required permissions to backup virtual machines
- If using Internet Proxy to connect to FAB then FAB backup proxies name resolution should be working from the server where the VSA agent would be installed (the access node).
- The FAB File System agent has been installed on the future Access Node

VSA Recommendations:

- Is preferred to have direct access to FAB from the access node (No Internet proxy if possible)
- The Access Node File System backup can be configured if required to secure the Access Node itself
- With limitation due to the Network link, VSA is best suited for small sized environments to protect (several VMs)
- Access Node specification for small sized infrastructure to protect:
2 CPU cores, 16 GB RAM or 2 vCPUs / 24 GB RAM

ABACUS on the bandwidth consumption using the FAB VSA agent:

Access node using Internet Proxy, and with 100 Mbps shared Internet Link

- Backup – 4 VMs concurrently, consolidated size of 96 GB
 - ➔ Sustained backup speed between 6 - 8 MB/s
- Restore – 1 VM, Full Restore, Size 17GB
 - ➔ Average restore speed 13 MB/s

- [Download the package](#) from the Download center on the future Access Node server:

Download Center

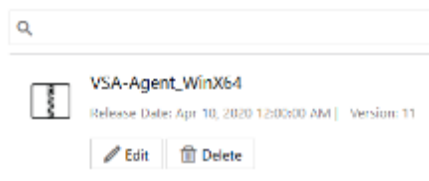
Reset filters

Version

11 (10)

Category [\[Organize\]](#)

Add-on agents (additional...) (4)



- [Unzip the package](#) onto the server:

is PC > SYSTEM (C:) > Temp > VSA_WinX64

Name	Date modified	Type	Size
BinaryPayload	6/11/2020 8:58 AM	File folder	
Common	6/11/2020 8:58 AM	File folder	
ThirdParty	6/11/2020 8:58 AM	File folder	
BinaryInfo	6/11/2020 8:58 AM	XML Document	3,199 KB
BinaryInfo.xml.description	6/11/2020 8:58 AM	DESCRIPTION File	1 KB
Brandlist	6/11/2020 8:58 AM	Text Document	1 KB
cv7z	6/11/2020 8:58 AM	Application	961 KB
LaunchInstaller	6/11/2020 8:58 AM	Application	189 KB
QInstaller	6/11/2020 8:58 AM	Application	174 KB
RootFilesSummary	6/11/2020 8:58 AM	XML Document	1 KB
Setup	6/11/2020 8:59 AM	Application	17,374 KB
version	6/11/2020 8:58 AM	Text Document	1 KB
WinPackages	6/11/2020 8:58 AM	XML Document	71 KB

- Run the install by double clicking on the “[Setup.exe](#)”

Note: Some OS security policy might block the batch or .exe file.
In that case, [right click](#) the Setup.exe, go to [properties](#) and select [unlock](#)



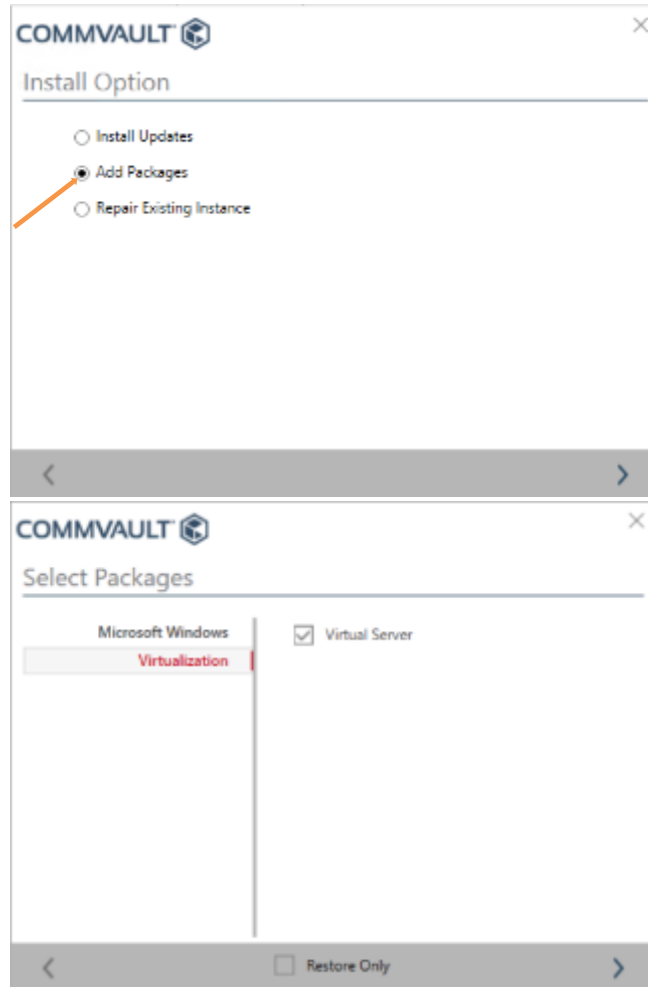
- Follow the [instructions](#) in the setup, choose the [language](#), accept the [License](#), then check the box [Install packages on this computer](#).

- ☒ Install packages on this computer

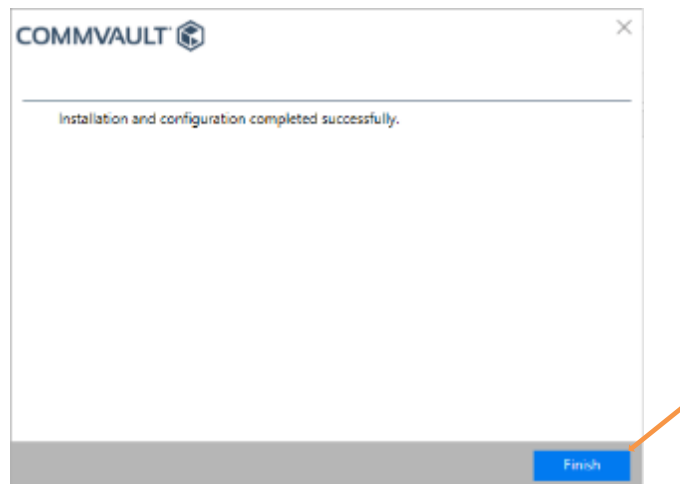
To install packages on this computer, administrator privileges are required.

- ☐ Create a custom package to install on a different computer

- Select the “[add packages](#)” and “[Virtualization](#) / [Virtual Server](#)” options:



- The [installation completes](#) after several minutes, click on “[Finish](#)”



- Ensure that your server is discovered in the [FAB Backup console](#):
Go to the [Administration / Servers](#) section:

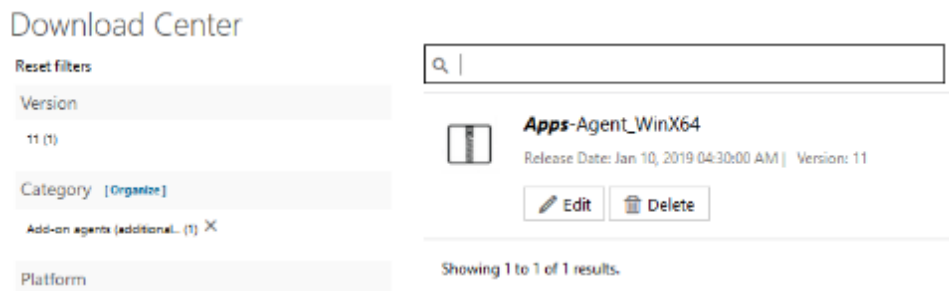
Servers	
Name	Agent ↓
xxxxxx	Windows File System, Virtual Server

MS Exchange agent installation

Prerequisites:

- The required agent package (corresponding to your need) has been downloaded from the download Center
- This downloaded agent package has been transferred to the Oracle server to protect
- The Oracle server to protect is able to communicate with the FAB central infrastructure on https (port 443)
- An authcode has been generated for the required FE/FAB Company (see above "authcode" section)
- You have administrator / root privileges on the Oracle Server to protect
- Filesystem agent has been installed on the server.

- [Download package](#) from the Download center on the Exchange server:



- Unzip / Un-compress the package onto the Exchange server to protect:

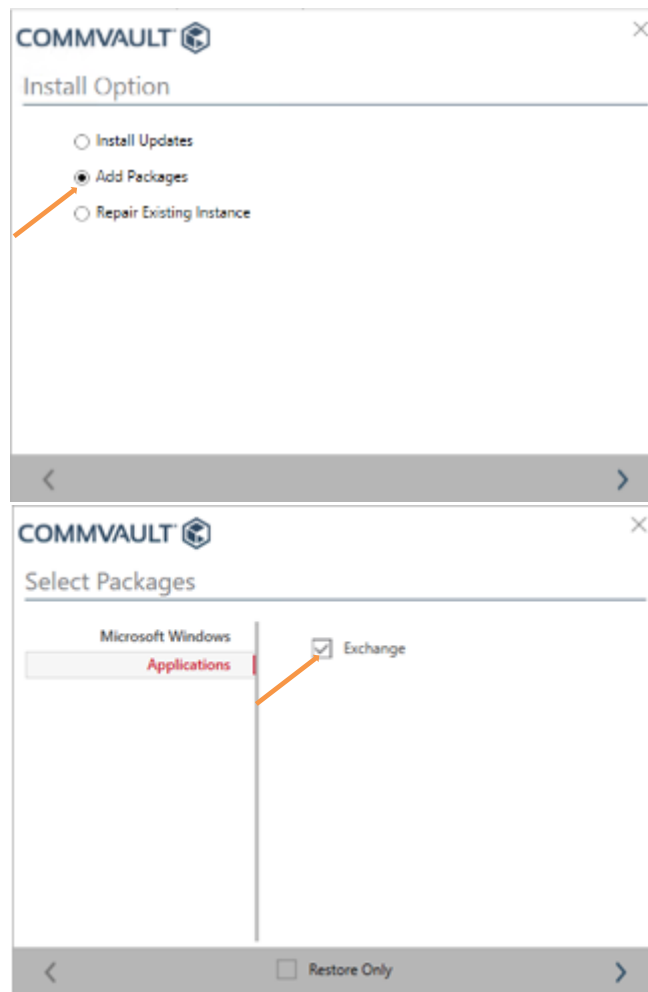
is PC > New Volume (D:) > Software > Apps_WinX64 >

Name	Date modified	Type
BinaryPayload	6/12/2020 6:53 PM	File folder
Common	6/12/2020 6:53 PM	File folder
ThirdParty	6/12/2020 6:53 PM	File folder
BinaryInfo	6/12/2020 6:53 PM	XML Document
BinaryInfo.xml.description	6/12/2020 6:53 PM	DESCRIPTION File
Brandlist	6/12/2020 6:53 PM	Text Document
cv7z	6/12/2020 6:53 PM	Application
LaunchInstaller	6/12/2020 6:53 PM	Application
QInstaller	6/12/2020 6:53 PM	Application
RootFilesSummary	6/12/2020 6:53 PM	XML Document
Setup	6/12/2020 6:53 PM	Application
version	6/12/2020 6:53 PM	Text Document
WinPackages	6/12/2020 6:53 PM	XML Document

- Run the install by double clicking on the “[Setup.exe](#)”

Note: Some OS security policy might block the batch or .exe file.
In that case, [right click](#) the Setup.exe, go to [properties](#) and select [unblock](#)

- Follow the instructions in the installer according to your need, select the “[add packages](#)” and “Applications / [Exchange](#)” options:



- The [installation completes](#) after several minutes, click on “[Finish](#)”

FAB Configuration

This chapter details all configurations editable within FAB.

Agent Management

Add a new agent to an existing device

You may require adding a different agent to a device already backed up in FAB.

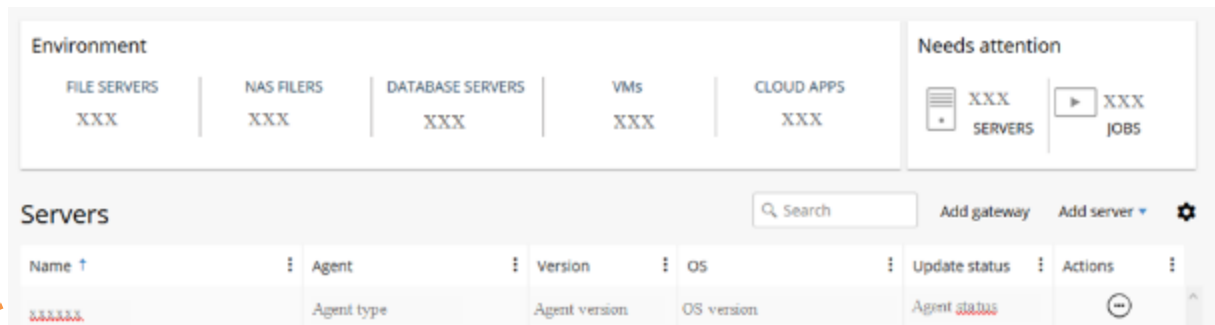
To do so simply follow the agent installation procedure described in section [FAB Deployment / Agent installation](#).

Installing a new FAB agent has no impact on any already existing ones.

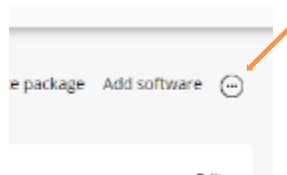
Remove an agent from an existing device

If you wish to remove a FAB agent from a device, you only need to uninstall it.

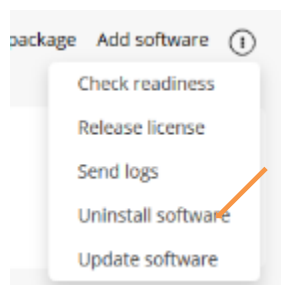
- Connect to the [FAB Backup console](#) and go to the [Administration / Servers](#) section
- Find the device for which you wish to add a remove agent and click on its name



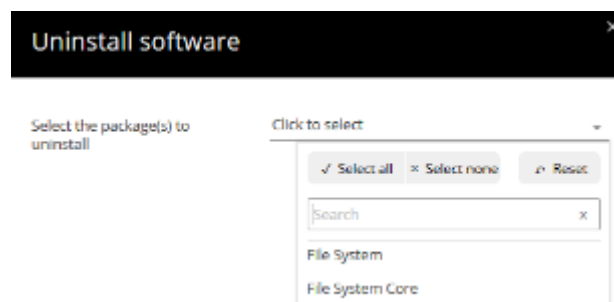
- Click on the [More actions](#) button in the top right corner



- and [Uninstall Software](#)



- [Select the correct agent](#) to remove in the select menu and click on [ok](#)



- Then click on [uninstall](#)

Note: All backups made with an agent will **not be deleted** after uninstalling this agent. Recovery points will remain available during the whole backup retention period. However, restoring to a different location will be required, as the source agent will not be available anymore.

Update an Agent

It is not required of you to organize your agents updates.

Those are pushed automatically, on a weekly basis (on Sundays), by the FAB infrastructure directly.

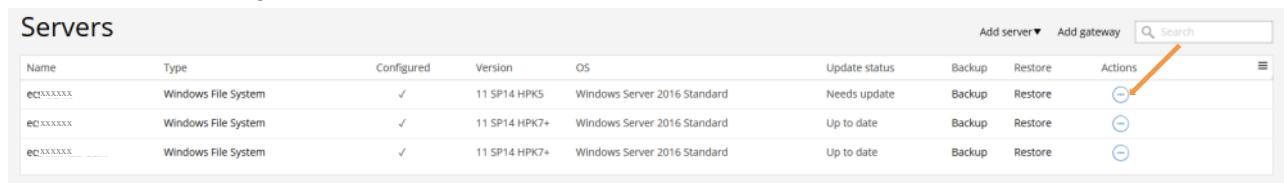
However, you still have the possibility to follow up your FAB protection agents update status from the [FAB Backup console](#). Check the agents' status in the [Administration / Servers](#) section:



Name	Type	Configured	Version	OS	Update status	Backup	Restore	Actions
ecs-xxxxxx	Windows File System	✓	11 SP14 HPK5	Windows Server 2016 Standard	Needs update	Backup	Restore	⋮

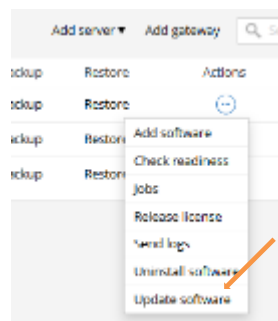
If you require to update a deployed agent yourself:

- Connect to [the FAB Backup console](#), and go to the [Administration / Servers](#) section.
- Select the required agent to update and click on the [More actions](#) button

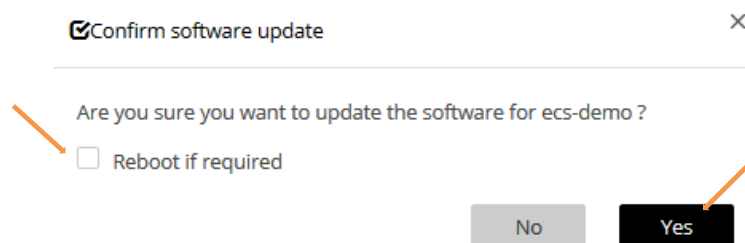


Name	Type	Configured	Version	OS	Update status	Backup	Restore	Actions
ecs-xxxxxx	Windows File System	✓	11 SP14 HPK5	Windows Server 2016 Standard	Needs update	Backup	Restore	⋮
ecs-xxxxxx	Windows File System	✓	11 SP14 HPK7+	Windows Server 2016 Standard	Up to date	Backup	Restore	⋮
ecs-xxxxxx	Windows File System	✓	11 SP14 HPK7+	Windows Server 2016 Standard	Up to date	Backup	Restore	⋮

- Click on [Update software](#)



- Check the [Reboot if required](#) checkbox if you will, and Click on [Yes](#) to finalize



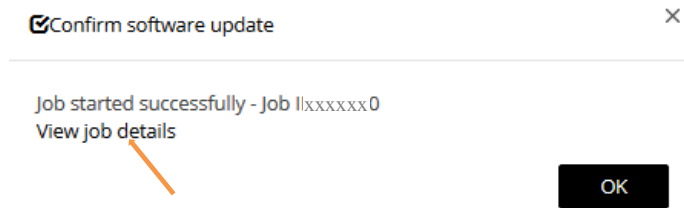
☒ Confirm software update

Are you sure you want to update the software for ecs-demo ?

☐ Reboot if required

No Yes

- Click on [View job details](#) for further details



- In the [active jobs](#) you can find the installation status :



The update job should take a few minutes

Backups Configuration

Backup Definitions

In order to run, a backup must be defined specific parameters:

- Backup Plan:
 - Schedule
 - Storage location
 - Data retention
- Subclient:
 - Content
 - Exclusions and/or Exceptions

Note: All plans share the following schedule policy:

- Daily incremental backups on weekdays in the backup window: 8PM to 8AM GMT+1
- Weekly Full backups during the weekend
- Database backup logs every 4 hours

FAB offers various Backup levels used depending on the scenario:

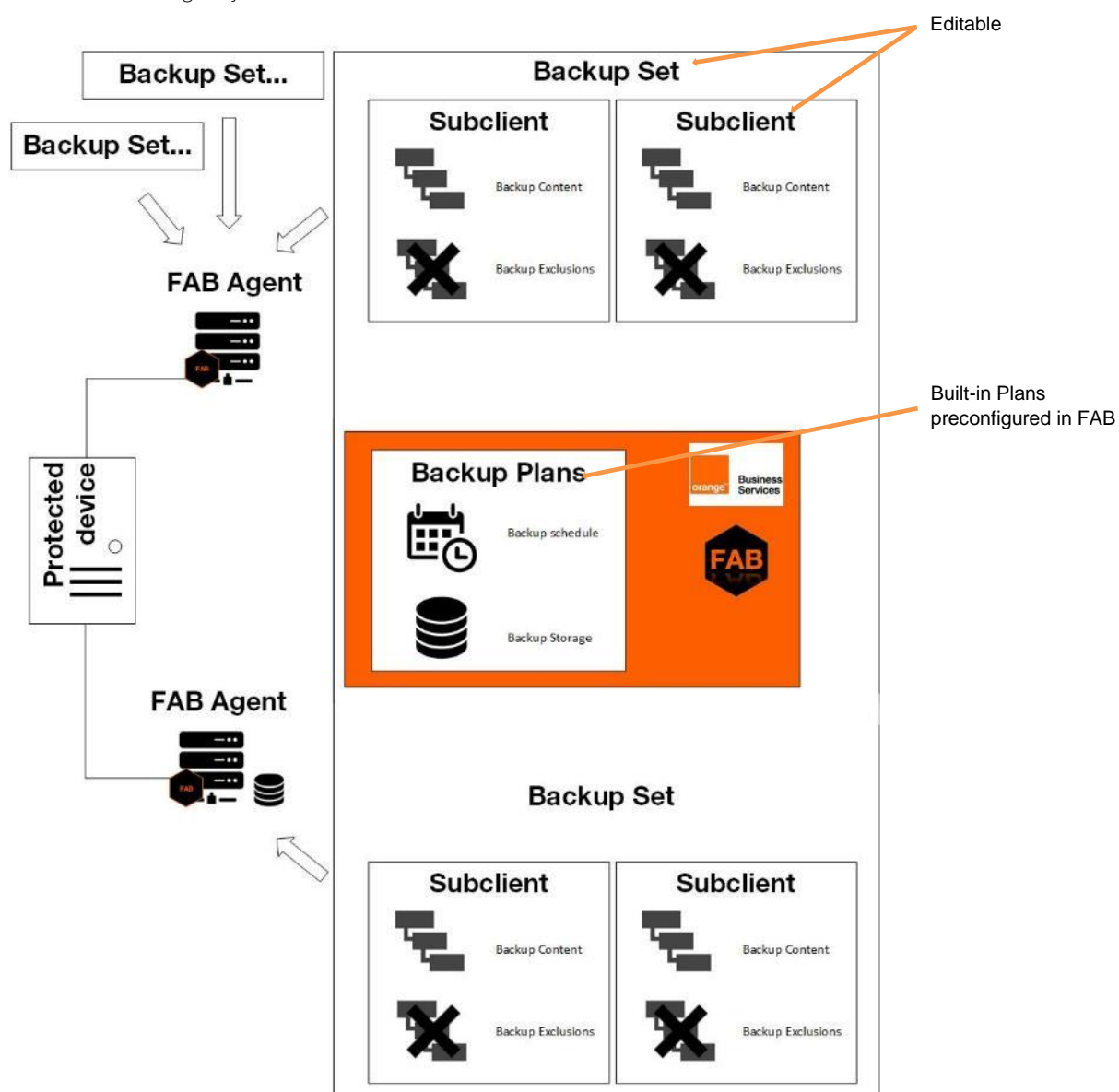
- Full: A Full backup includes everything defined in the backup content of the backed up Subclient. The first backup of a subclient is always a Full backup.
- Synthetic Full: A Full backup built on the backend with all differential/incremental backups since the last Full backup. A synthetic Full does not require interactions with the FAB agent and has no impact on the backed up device. However, a synthetic full backup does not include the files modified since the last backup.
- Incremental: An incremental backup includes every data modified since the last Full or Incremental backup.
- Differential: A differential backup includes every data modified since the last Full backup only.
- Transaction Log: Only for DB agents, the transaction log is the DB backup log. It includes all committed and uncommitted transactions. A new DB log file is generated.

In FAB, Backups are presented in **Backup sets** for a type of agent, allowing the association of **Backup Plans** with **Subclients** on various configurations for each agent and each device.

- A protected device may get several agents (File System, Database, Apps)
- Each agent may contain several backup sets
- Each backup set may associate various subclients (content, exclusions and possible exceptions) with backup Plans (schedule & storage policies)

Note: Backup Plans are pre-configured in FAB

Such can be represented the following way:



Add /modify a backup set

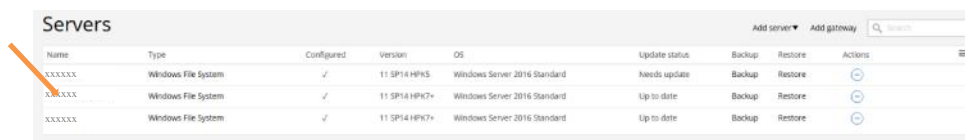
By design, when adding a new FS agent to your FAB organization, a default Backup set is created containing a single Default subclient, and associating it with the default Plan set on your Organization.

Such allows every new FS agents to backup every file on your device without any specific configuration to bring. But these default configurations (backup set and subclient) may be modified as you see fit, or you may add other subclients to your backup set in order to comply with your Company protection strategy.

To add/edit a backup set:

Note: Make sure you have selected your Company (see **Dashboard** section)

- Connect to the [FAB Backup console](#), [Administration / Servers](#) section:
- [Select the device](#) for which you wish to modify the backup:



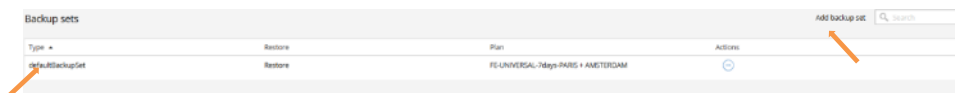
Name	Type	Configured	Version	OS	Update status	Backup	Restore	Actions
xxxxxx	Windows File System	✓	11 SP14 HPK5	Windows Server 2016 Standard	Needs update	Backup	Restore	⚙️
xxxxxx	Windows File System	✓	11 SP14 HPK7+	Windows Server 2016 Standard	Up to date	Backup	Restore	⚙️
xxxxxx	Windows File System	✓	11 SP14 HPK7+	Windows Server 2016 Standard	Up to date	Backup	Restore	⚙️

- [Select the desired agent type](#) for this device (File System, Database, Apps)



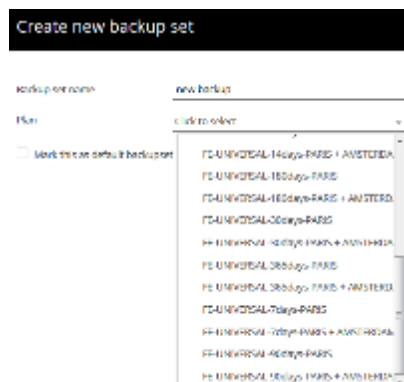
Type	Configured	Install date
File System	✓	Oct 17, 2018 2:58:11 PM

- In the top right corner, click on [Add backup set](#) to add one, or click on the existing [backup set](#) to edit it



Type	Restore	Plan	Actions
DefaultBackupSet	Restore	FS-UNIVERSAL-7days-PARIS + AMSTERDAM	⚙️

- For a new backup set, choose a name, [select the backup Plan](#) to associate and click on **OK**



Create new backup set

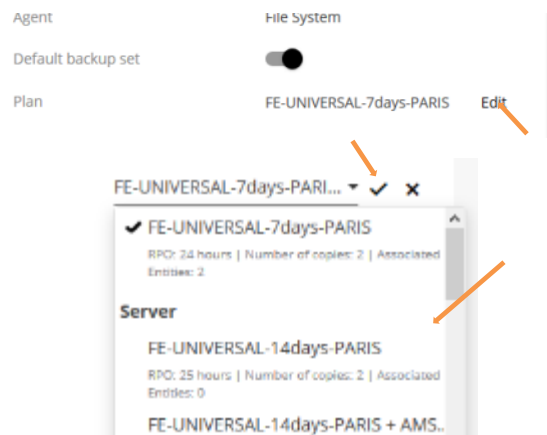
Backup set name: new backup

Plan: click to select

☐ Mark this as default backup set

- FS-UNIVERSAL-14days-PARIS + AMSTERDAM
- FS-UNIVERSAL-180days-PARIS
- FS-UNIVERSAL-180days-PARIS + AMSTERDAM
- FS-UNIVERSAL-30days-PARIS
- FS-UNIVERSAL-7days-PARIS + AMSTERDAM
- FS-UNIVERSAL-30days-PARIS
- FS-UNIVERSAL-30days-PARIS + AMSTERDAM
- FS-UNIVERSAL-7days-PARIS
- FS-UNIVERSAL-7days-PARIS + AMSTERDAM
- FS-UNIVERSAL-30days-PARIS
- FS-UNIVERSAL-30days-PARIS + AMSTERDAM

- For editing an existing backup set, click on [edit](#), to define its backup Plan, [select the backup Plan](#) to associate and click on [v](#)



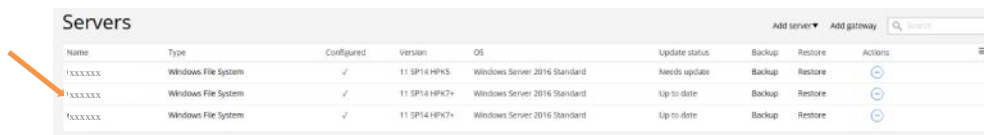
Note: Depending on the agent, adding a backup set may automatically create a Default subclient

Activity disabling

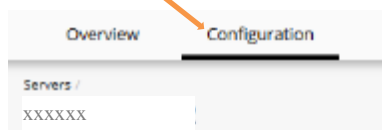
If required the any server backup / restore activity can be disabled either temporarily or till the time you enable back the activity manually.

To disable/enable a server activity:

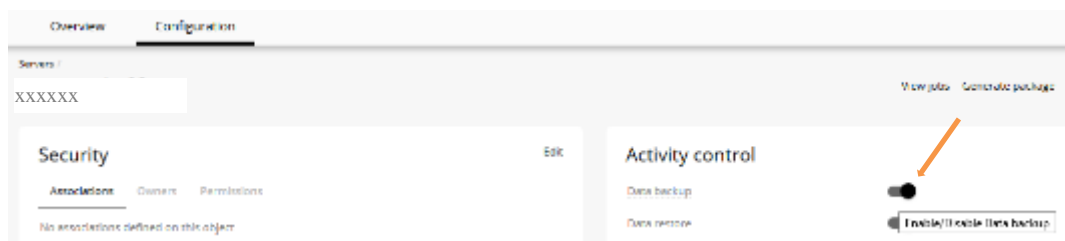
- Connect to the [FAB Backup console](#), [Administration / Servers](#) section:
- [Select the device](#) for which you wish to modify the activity:



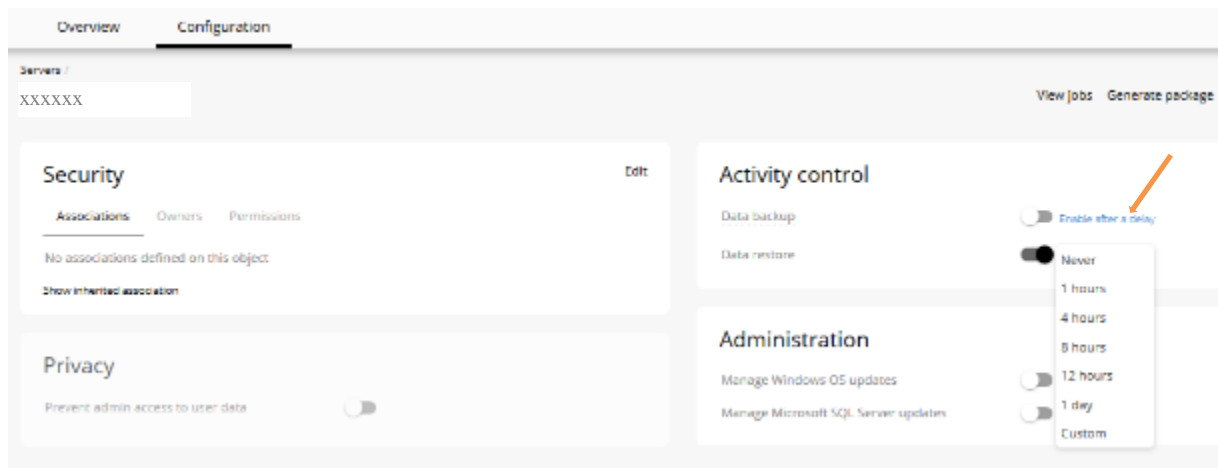
- Click on the [Configuration](#)



- [Slide toggle bar](#) to disable the Data backup or Data restore.



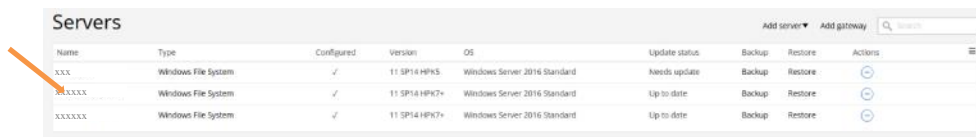
- Click [Enable after a delay](#) to auto enable backup/restore after certain duration, choose the desired delay period or create custom.



Subclient management

In order to modify a backup content, add or remove exclusions, create file exclusion exceptions, or modify a Backup Plan to a given set of files, you may add or edit subclients:

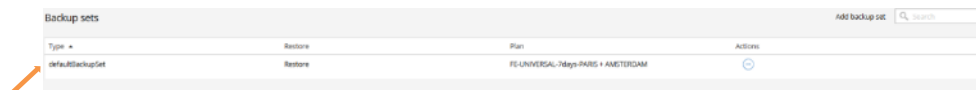
- Connect to the [FAB Backup console](#), [Administration / Servers](#) section:
- Select the device for which you wish to modify the backup:



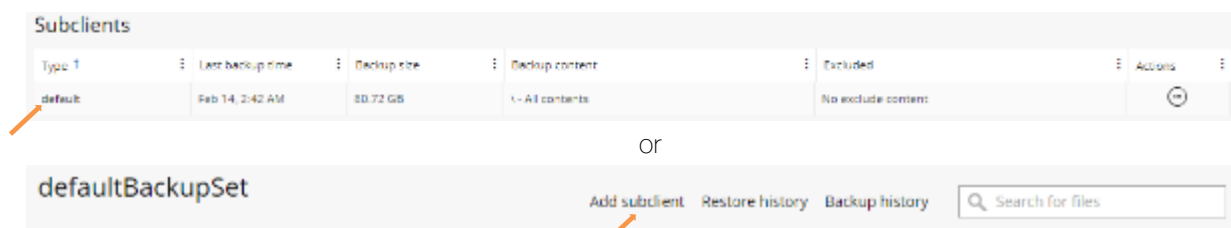
- Select the desired agent type for this device (File System, Database, Apps)



- Click on the [backup set](#) to edit



- Select the subclient to edit, or click on [Add subclient](#) in the top right corner, to create a new one



- o If creation, inform a [Subclient name](#), determine the [Backup Plan configuration](#) required (disabled to keep the backup set default config), define the [Content](#) and possible [Exclusions](#) and/or [Exceptions](#), and click on [Save](#) as follows

Add subclient

Subclient name

Backup configuration

☒ Use backup plan

Plan FE-SERVER-14Day-4Week-3Month-PARIS

Backup content

Content Exclusions Exceptions

Enter custom path Browse Impersonate user

☐ Files and folders

Add files and folders to the content

Backup system state ☐

Cancel Save

Note: You may edit a subclient content (+ exceptions and exclusions) by clicking on Edit in its Content frame (in the subclient detail sheet)

Content

\\ - All contents

[System state]

Edit

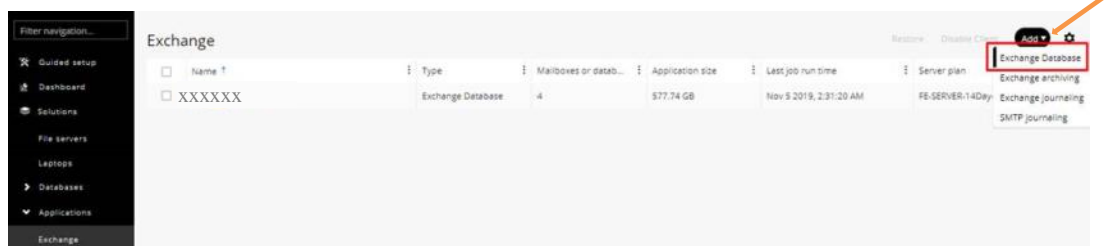
Application backup Configuration

Microsoft Exchange (DAG) Backup Configuration

Prerequisites:

The FAB Exchange agent is installed on all nodes

- In the [FAB Backup console](#), go to the [Solutions / Applications / Exchange](#) section
- Click on [Add](#) and then select [Exchange Database](#)



- Provide all required details, then click on [Discover](#) and provide input after discovery

Add Exchange Database

Server name

Test-Exchange

Plan

FE-UNIVERSAL-7days-PARIS

AD domain name

XXXXXX

Username

Administrator

Password

.....

☒ Access node for DAG discovery

Exchange version

Exchange 2016

Add Exchange Database

Server name

xxxxxxx

Plan

FE-UNIVERSAL-7days-PARIS

AD domain name

xxxxxxx

Username

Administrator

Password

.....

☒ Access node for DAG discovery

xxxxxxxxxxxxxxxx

DAG servers

xxxxxxxxxxxxxxxx

Member servers

xxxxxxxxxxxxxxxx

Exchange version

Exchange 2016

- In the [DAG servers list](#), select a DAG with an available member server
- In the [Member servers list](#), select a member server, and then click on [OK](#)

Add Mailboxes to backup:

- Go to the [FAB Backup console](#), [Solutions / Applications / Exchange](#) section
- Click on the [Exchange server](#)

Exchange

Restore

Disable Client

Add

<input type="checkbox"/>	Name ↑	Type	Mailboxes o...	Application s...	Last Job run time	Server plan
<input type="checkbox"/>	xxxxxx	Exchange Datab...	4	585.83 GB	Feb 16 2020, 8:08:42 PM	FE-SERVER-14Day-5Wee...

- In the [Subclients](#) section, click on the [subclient](#)

Subclients

Restore Online DB messages

Add subclient

Import file

Name	Last backup time	Last backup size	Actions
default	Feb 16, 8:08:42 PM	6.41 GB	...

- In the [Content](#) section, click on [Edit](#)

Content

Edit

Microsoft Information Store\OAGFEMD0004

Microsoft Information Store\OAGFEMD0002

Microsoft Information Store\OAGFEMD0001

View more databases (Total databases: 4)

- [Select the databases](#) to backup

	Subclient
<input type="checkbox"/>	Database
<input checked="" type="checkbox"/>	Microsoft Information Store\XXXXXX
<input checked="" type="checkbox"/>	Microsoft Information Store\XXXXXX
<input checked="" type="checkbox"/>	Microsoft Information Store\XXXXXX
<input checked="" type="checkbox"/>	Microsoft Information Store\XXXXXX

- Click on [Save](#)
- In the Server details section, click on [Edit](#)

Server details

Server selection: Automatic

DAG options: Backup from passive copy

Edit

- Select [Backup from passive copy](#) in the DAG options

Server details

Server selection: ☒ Automatic ☐ Manual

DAG options: ☒ Backup from passive copy, ☐ Backup from active copy if no passive copy is available, ☐ Use last activation preference to select passive copy

- Click on [Save](#)
- In the [Settings](#) section, enable [Optimize for message level recovery](#)

Settings

Maximum streams that can be used: 2

Optimize for message level recovery: ☒

Edit

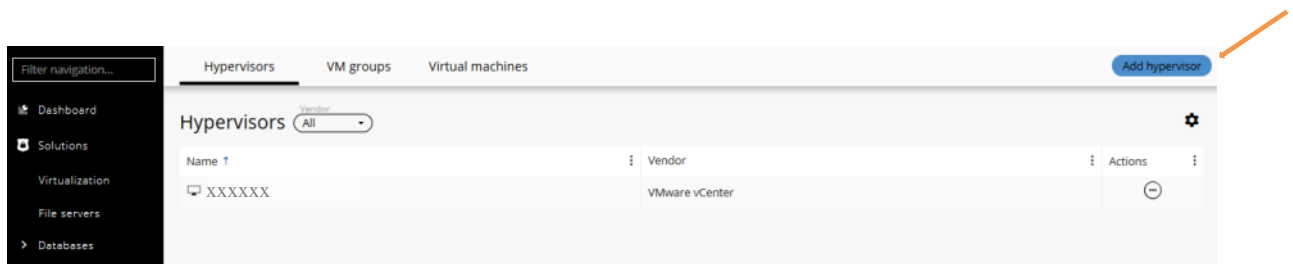
(VSA) Virtualization Client backup Configuration

(VSA) VMware Backup Configuration

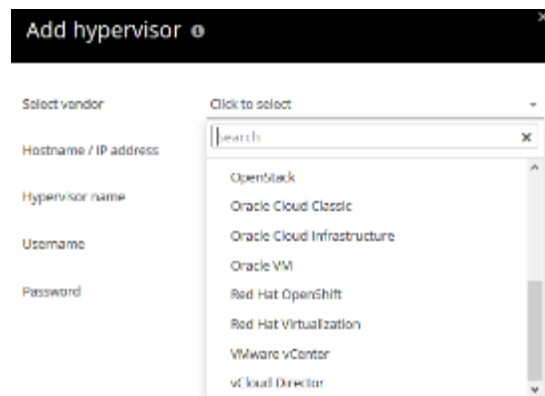
Prerequisites:

- This Access Node (on which the FAB VSA agent is installed) must be able to reach the vCenter on port 443 and all required ESXi servers on ports 443 and 902
- The VMs to protect have up-to-date VM tools installed

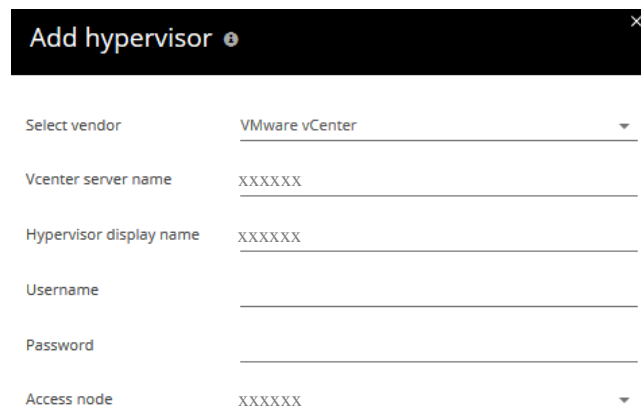
- In the [FAB Backup console](#), go to the [Solutions / Virtualization](#) section
- Click on [Add hypervisor](#) in the [Hypervisors](#) tab



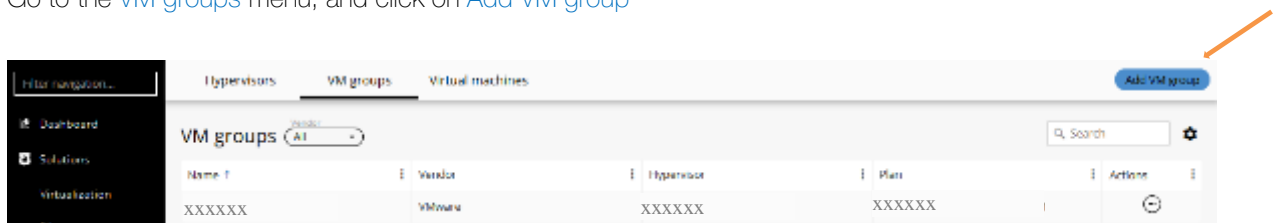
- In the [Add hypervisor](#) window, from the drop down list in Select vendor click [VMware vCenter](#).



Provide the vCenter [Hostname](#), [Hypervisor display name](#) (a display name, can be anything), [Username](#) and [Password](#), and [Access node](#) (server with FAB VSA agent installed would be automatically selected).



- Go to the [VM groups](#) menu, and click on [Add VM group](#)



- In the Add VM group window, choose the [Hypervisor](#) that was added in previous steps. Provide a [Name](#) (any name). In the [Browse and select VMs](#) there are several options to help you select your VMs to protect from your VMware infrastructure. [Check the boxes](#) next the the VMs to protect

Add VM group

Hypervisors

XXXXXX

Name

Browse and select VMs

Hosts and clusters

Search VMs

Select all

Clear all

BKPLABDatacenter

BKPLABCluster

Backup configuration

Use backup plan

Plan

XXXXXX

Cancel

Save

- Select the [Plan](#) to associate the this backup from the dropdown list based upon the region where your server / vCenter is located

Note: The Plan will determine where to store your data.
It is recommended to take extra attention in determining the data location (see Backup plans description section) as it may cause degraded performances

- Click on [Save](#)

(VSA) VM application consistency setup

VMware tool is by default used for taking application consistent backup, but to provide granular application level recovery this needs to be modified.

- In the [FAB Backup console](#), go to the [Solutions / Applications / Virtualization](#) section
- Go to the [VM groups](#) menu, and click on the configured [VM group](#) (see VMware backup Configuration section for configuring it)
- then go to the [Configuration](#) tab and click on [edit](#) under the [Settings](#) frame

Orange Business Services | File & Application Backup

54

Settings Edit

Use changed block tracking	<input checked="" type="checkbox"/>
Auto detect VM Owner	<input type="checkbox"/>
No. of readers	5
Virtual machine backup type	File system and application consistent
Transport mode for VMware	Auto
Datastore freespace required	10%

- In the [Edit settings](#) window...

Edit settings

No. of readers

Virtual machine backup type

☐ Application Aware
Uses in-guest application plug-ins to assist the Virtual Server Agent quiescing and providing granular application level recoverability.

☒ File system and application consistent
(Needs VMWare Tools installed)
Uses VMware tools to perform a quiesced backup of the file system and applications.

☐ Crash consistent
Uses VMware software snapshots to allow a basic backup of the virtual machine.

Transport mode for VMware

☒ Datastore freespace check

Datastore freespace required %

- ...Select the appropriate option:

Application Aware: It quiesces the application, flushes its memory, and completes pending writes, then creates a software snapshot of application data. After the software snapshot is created, the application resumes

Note: This option is supported on Windows VMs (and some Linux)

Selecting this option requires to set [guest credentials](#) by clicking on the [key](#) symbol

Edit settings

No. of readers

Virtual machine backup type

☒ Application Aware 
Uses in-guest application plug-ins to assist the Virtual Server Agent quiescing and providing granular application level recoverability.

Set guest credentials

Guest Credentials

Username

Password

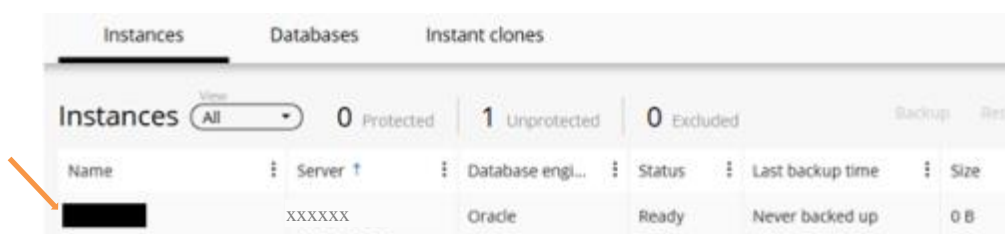
Confirm password

Database backup Configuration

Oracle Backup Configuration

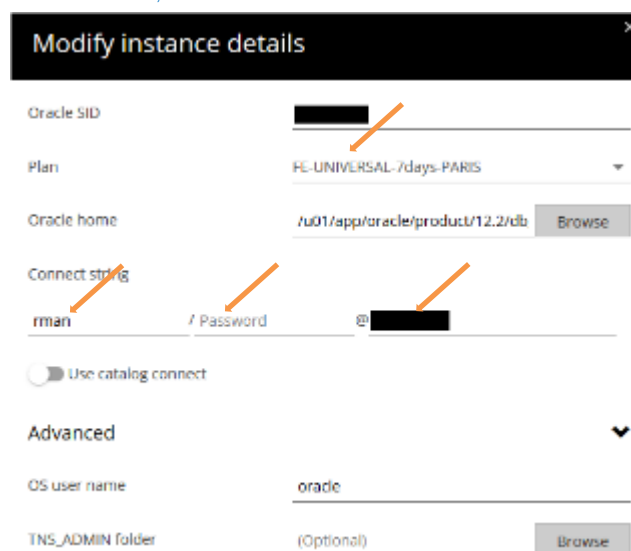
Prerequisite: The FAB Oracle agent has been installed on the Oracle server to protect as instructed in section Oracle agent installation

- In the [FAB Backup console](#), go to the [Solutions / Databases / DB Instances](#) section and [Click on the DB instance](#) (the instance is automatically discovered once the agent correctly installed, if not, follow the instructions detailed 3 steps here below)



Instances						
View: All 0 Protected 1 Unprotected 0 Excluded Backup Reset						
Name	Server	Database engi...	Status	Last backup time	Size	
XXXXXX	XXXXXX	Oracle	Ready	Never backed up	0 B	

- Click on [edit](#) under the [General section](#) in the [Overview page](#)
- [Select the Backup Plan](#) (see the [Backup Plans description](#) section) to use for the backup of this Oracle environment, and [provide the connection credentials](#), then click on [Save](#)



Modify instance details

Oracle SID: [redacted]

Plan: FE-UNIVERSAL-7days-PARIS

Oracle home: /u01/app/oracle/product/12.2/db [Browse]

Connect string: rman / Password: [redacted] @ [redacted]

☐ Use catalog connect

Advanced

OS user name: oracle

TNS_ADMIN folder: (Optional) [Browse]

- If the Instance is not automatically discovered, click on [Add instance](#) and provide the details.

New oracle instance

Server name: xxxxxx

Oracle SID: [redacted]

Plan: FE-UNIVERSAL-7days-PARIS

Oracle home: /u01/app/oracle/product/12.2/db [Browse]

Connect string: rman / **** @ [redacted]

☐ Use catalog connect

MS SQL Backup Configuration

Prerequisites:

The FAB MS-SQL agent is installed on node

- Ensure that your server is discovered in the [FAB Backup console](#):
Go to the [Solutions / Databases / SQL servers](#) section:

Name	Version	Server	Status	Number Of ...	SLA	Plan	Actions
xxxx	10.0.1600.22	xxxx	Ready	0	Missed	FE-UNIVERSAL-7days-PA	[icon]

- If the instance is not detected after the installation, or if the user account for the SQL service is not the local system account, then, in the [Solutions / Databases / SQL Server](#) section, click on “[Add Instance](#)” :



- Select the [Server](#) and the [SQL instance](#), define the [credentials](#) required, and click on the [Add](#) button:

Hyperscalers applications protection configuration

Exchange Online (Microsoft 365 mailbox) Configuration

Prerequisites:

- Connection through Azure Active Directory exclusively
- Exchange Online service account with global administrator role
- Multi-Factor Authentication must be disabled on your O365 environment

- In the [FAB Backup console](#), go to the [Solutions / Office 365](#) section
- Click on [Add Office 365 App](#)

Office 365 apps

Add Office 365 app

- In the [Add Office 365 app](#) window, provide the application [Name](#) (pseudo name to identify this Exchange online application with all its mailboxes)
- It's mandatory to select the **FE-O365-Server-Plan** plan from the drop down list in [Server plan](#)
- Input [Exchange Online Administrator name](#) and [Password](#), Once done Click on [Create Azure AD app](#)

- A Microsoft Azure authentication window pops up. Enter your admin credentials to authorize the app.

- Click on [Accept](#) and then [Save](#) the Exchange Online wizard

- An new **app** in [Solutions / Office 365](#) and a new **server resource** in [Administration / Servers](#) are now created with the name of the Exchange client you specified in the wizard

User Mailbox protection (sub client) configuration

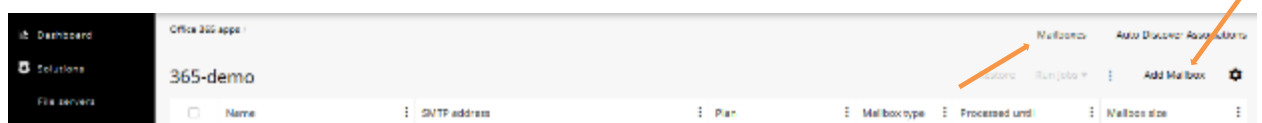
Once the Exchange online client is created, each user mailbox (or Azure group) needs to be associated with a subclient and an Exchange plan assigned.

- In the [FAB Backup console](#), [Solutions / Office 365](#) section, select the MS 365 App name of the mailbox to protect, click on the [App name](#)

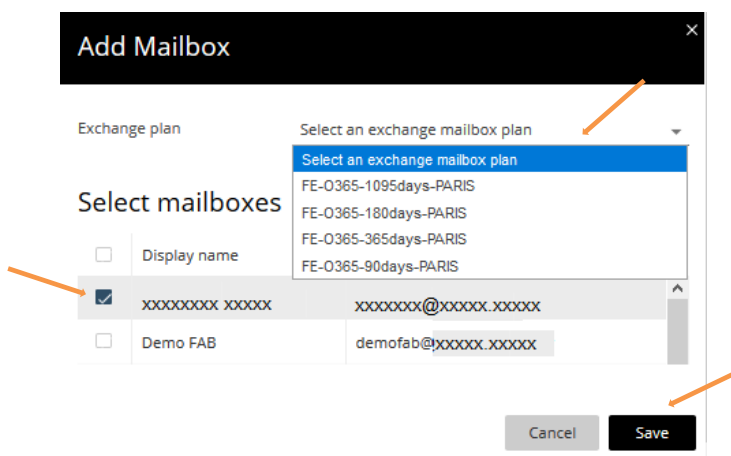


App name	Service type	Application Size
365-demo	Exchange Online	0 B

- Select the [Mailboxes](#) section (top right corner) and Click [Add Mailbox](#)



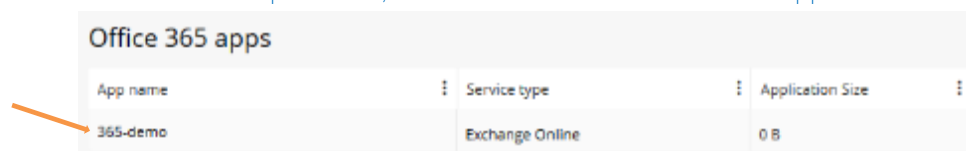
- In the Add Mailbox window, [Select](#) the user mailboxes and [Choose](#) the desired Exchange plan accordingly then click on [Save](#).



Note: All mailboxes configured on the same plan will share the same backup configuration (backup retention period and location). For using different configurations, you must use different plans on the mailboxes.

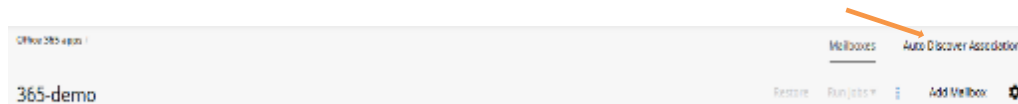
- (Optional) AD Groups can be added so that any new user's mailbox can be automatically backed up with the retention set on the group.

- In the [FAB Backup console](#), [Solutions / Office 365](#) click on the [App name](#)

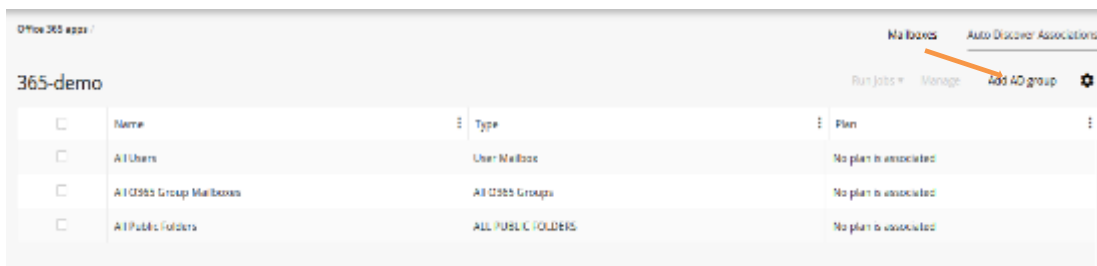


App name	Service type	Application Size
365-demo	Exchange Online	0 B

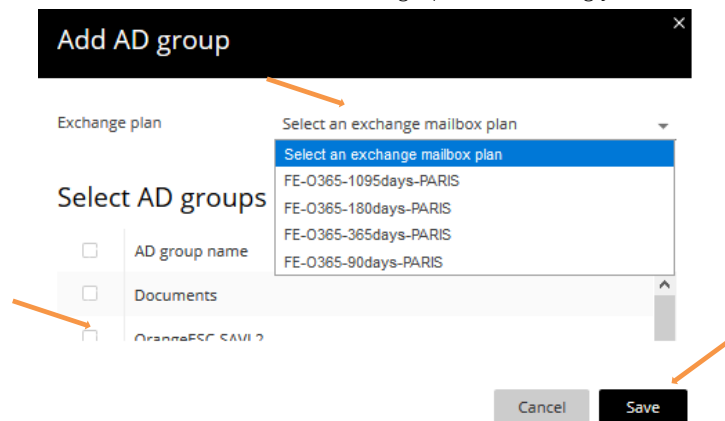
- Click on [Auto Discover Associations](#)



- Click on [Add AD group](#)



- In the Add AD group window [Select](#) the groups sharing the same backup retention requirements and [Choose](#) the desired Exchange plan accordingly, then click on [Save](#)



Disable User Mailbox backup

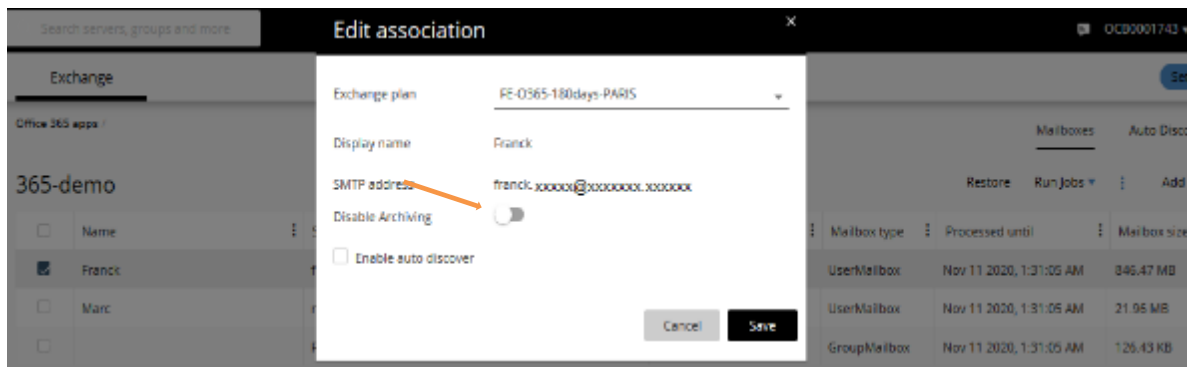
Notes:

- Disabled mailboxes don't consume any FAB frontend backup license.
- No backup job will run on a disabled mailbox backup
- Browse and restore operations remain available on backups ran before disabling

- In the [FAB Backup console](#), [Solutions / Office 365](#) section, click on the App name hosting the mailbox to disable
- [Select](#) the **user** mailbox to disable and click [Manage](#)




- In the Edit association window, enable the [Disable Archiving](#) option and then click [Save](#)

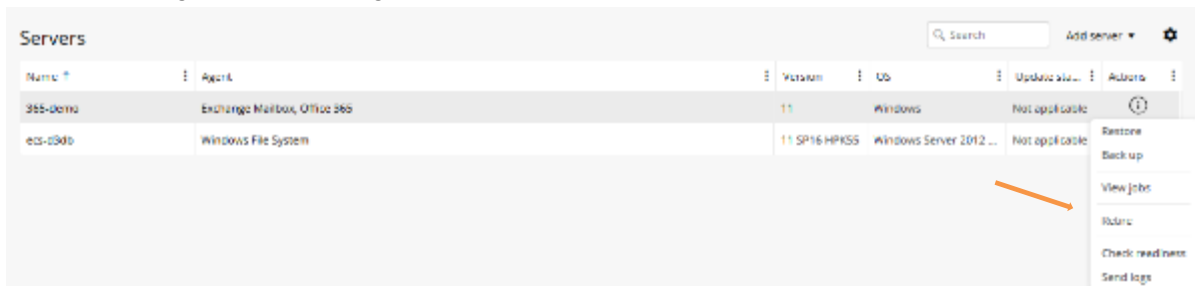


Delete Exchange Online Mailbox Client

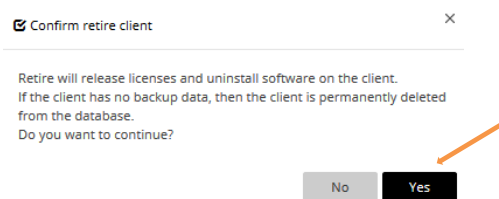
Note: Deleting the MS 365 App removes within 24hrs all the mailbox backups currently in retention for that app


To remove the whole MS 365 Exchange online application:

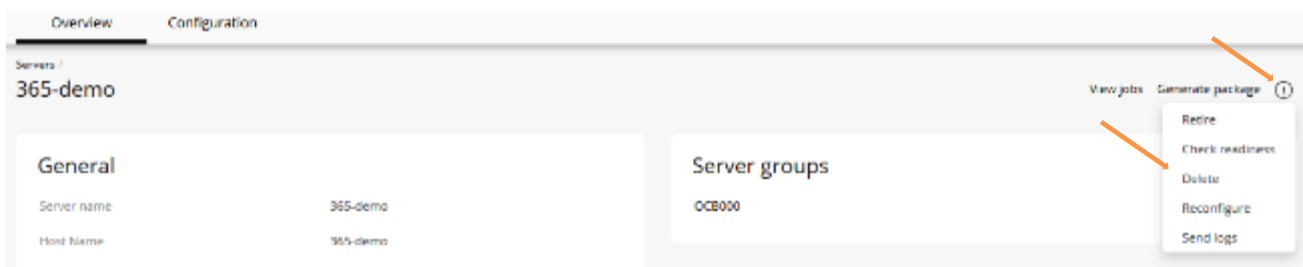
- In the [FAB Backup console](#), [Administration / Servers](#) section,
- [Click Action](#)  against the Exchange online App / client name and click [Retire](#)



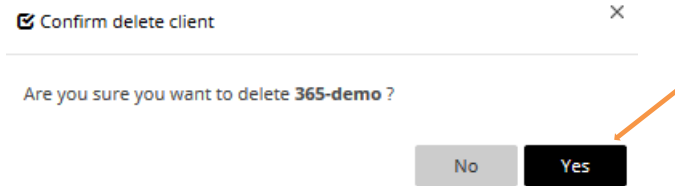
- [Click](#) Yes when asked to confirm data deletion.



- Then [Click](#) on the Exchange online App / client name, in the client Overview page click on the more action button  and select [Delete](#).



- [Confirm](#) the Exchange online App / client deletion by clicking [Yes](#)



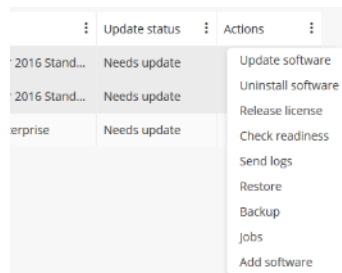
On-Demand backup & restore

Backups and Restore operations may be processed manually.
This chapter describes you how, for each case.

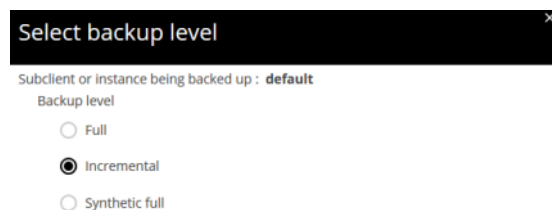
On-Demand backups

On-Demand Backup of Files & Folders

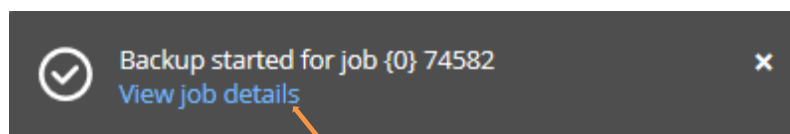
- In the [FAB Backup console](#), [Solutions / File Servers](#) section, select the server you wish to back up and click on the [Actions](#) button



- Click on [backup](#)
- Select the [backup level](#) (see [backup definition](#) section) and press [Ok](#)



- if you need more details, click on the [view job details](#) link and then on the [job ID](#)



Active jobs All ▾

Job id	Operation	Server	Agent type	Subclient	Server group	Size	Start	Elapsed	Progress
74582	Backup	ecs-ocbdemo-wxxxxxx	File System	default	OCB0001743_OIxxxxxx		Apr 4, 2:27:07 PM	52 sec	0%

Active jobs >

Job 74582 - [Backup]

Job summary

Type: Backup

Backup type: Incremental

Current phase: Backup

Status: Waiting

Progress: 25%

Source client computer: ecs-ocbxxxxxx

Subclient: default

Priority: 166

Start time: Apr 4, 2019 2:27:07 PM

Job started from: Interactive

Encryption enabled: Unavailable

Job details

Total number of files: 280

Agent: Windows File System

Backup set: defaultBackupSet

Media agent: pbaasfe xxxxxx

Data transferred on network: N/A

Transfer time: 0 sec

Average throughput: N/A

System state: No

Kill Suspend

Events All ▾

Severity	Event ID	Date	Program	Computer	Event code	Description
No events found						

Note: You may control the job from this page, in the top right corner

On-Demand Backup of Microsoft Exchange Database

To perform a manual backup of your Exchange Database (DAG):

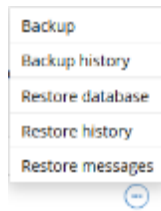
- In the [FAB Backup console](#), under the [Solutions / Applications / Exchange](#) section, click on the [Exchange Database](#) you wish to manually backup

Exchange							Restore	Disable Client	Add ▾	⚙
<input type="checkbox"/>	Name ↑	Type	Mailboxes o...	Application s...	Last job run time	Server plan				
<input type="checkbox"/>	xxxxxx	Exchange Datab...	4	585.83 GB	Feb 16 2020, 8:08:42 PM	FE-SERVER-14Day-5Wec...				

- In the [Subclients](#) section, find the [subclient](#) you wish to backup, and click on the action

Subclients				Restore offline DB messages	Add subclient
Name ▲	Last backup time	Last backup size	Actions		
default	Feb 16, 8:08:42 PM	6.41 GB	⋮		

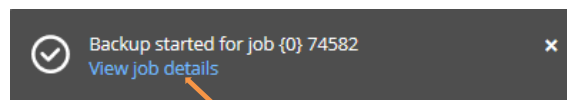
- Click on [Backup](#)



- Select the [backup level](#) (see **Backup Definition** section) you wish to run then press [Ok](#)



- If you require further details, click on the [View job details](#) link

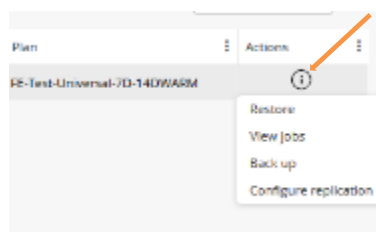


On-Demand Backup of Virtual Machines (using VSA)

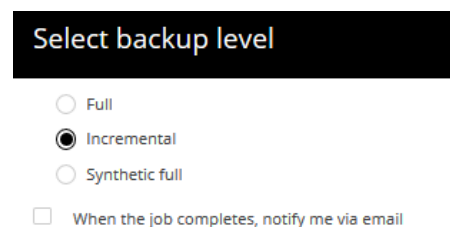
VM Groups Backup

To perform a manual backup of your VMs (groups):

- In the [FAB Backup console](#), under the [Solutions / Virtualization](#) section, click on the [VM groups](#) tab, from there select the group you wish to manually backup and click on the [Actions](#) button and click on [Back up](#)



- Select the required [backup level](#) (see the **Backup Definitions** section) and press [Ok](#)

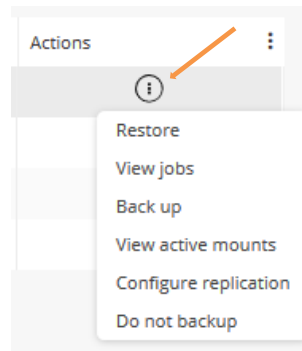


- For further details, click on the [view job details](#) link and then on the [job ID](#)

Individual VM Backup

To perform a manual backup of individual VM:

- In the [FAB Backup console](#), under the [Solutions / Virtualization](#) section, click on the [Virtual machines](#) tab, from there select the VM you wish to manually backup and click on its associated [Actions](#) button



- Click on [Back up](#)
- Select the [backup level](#) (see the [Backup Definitions](#) section) and press [Ok](#)

Select backup level

☐ Full

☒ Incremental

☐ Synthetic full


☐ When the job completes, notify me via email

- For further details, click on the [view job details](#) link and then on the [job ID](#)

On-Demand Backup of Databases

On-Demand Backup of SQL servers Instances

- In the [FAB Backup console](#), [Solutions / Databases / SQL Server](#) section
- Find the required [DB Instance](#) to backup and click on the [Actions](#) button

Instances							
Name ↑	Version	Server	Status	Number Of ...	SIA	Plan	Actions
XXXXXXXX	14.0.1000.169	XXXXXX	Ready	10	Met	FF-SERVER-14Day-5Wee	

- Click on [Backup](#)



- Select the required [backup level](#) (see [backup definition](#) section) and press [OK](#)

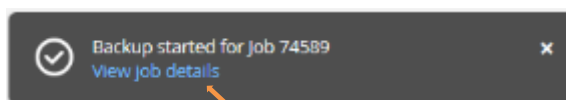


Note:

A transaction log backup operation backs up the transaction logs that contain records of all the committed and uncommitted transactions.

- Dirty pages are excluded during a transaction log backup operation
- This backup is consistent and contains only the new changes since the last full or transaction log backup
- After a database failure, you can run the transaction log backup to recover data to the point of failure
- You cannot perform a point-in-time restore from a full or a differential backup alone
- During a transaction log restore operation, if dirty pages are included, the completed transaction rolls forward. Any incomplete transaction that occurs during the time of the transaction log backup rolls back during the transaction log restore operation

- if you require further details, click on [View job details](#) link



Active jobs All ▾										Kill	Suspend	Search	Auto update off
	Job Id	Operation	Server	Agent type	Subclient	Server group	Size	Start	Elapsed	Progress			
<input type="checkbox"/>	74589	Backup	xxxxxx	SQL Server	default	xxxxxx	0 B	Apr 4, 2:47:03 PM	13 sec	0%			

Active jobs >

Job 74589 - [Backup]

View logs Send logs Kill Suspend

Job summary

Type: Backup

Backup type: 74589

Current phase: Database Backup

Status: Waiting

Progress: 67%

Source client computer: xxxxxx

Subclient: default

Priority: 166

Start time: Apr 4, 2019 2:47:03 PM

Job started from: Interactive

Encryption enabled: No

Job details

Total number of files: 4

Agent: SQL Server

Instance: xxxxxx LT

Media agent: xxxxxx

Size of application: 15.88 MB

Data transferred on network: 1.08 MB

Transfer time: 13 sec

Average throughput: 4.293119 GB/hr

Events All

Severity	Event ID	Date	Program	Computer	Event code	Description
info	314133	Apr 4, 2:47:35 PM	SQUIDA	xxxxxx	30342	The [Differential] Backup of database [master] is converted to full because only FULL backup is supported.

Note: You may control the job from this page, in the top right corner

On-Demand Backup of Oracle Instance

To perform a manual backup of your Oracle Instance:

- In the [FAB Backup console](#), under the [Solutions / Databases / DB Instances](#) section, click on the [Database Instance](#) to manually backup

Instances Databases Instant clones

Add instance Add server

Instances View All 1 Protected 0 Unprotected 0 Excluded Backup Restore Search

Name	Server	Database eng...	Status	Last backup time	Size	SLA	Plan
xxxxxx	xxxxxx	Oracle	Ready	Jun 12, 2020 2:46:11 PM	5.92 GB	Met	FE-UNIVERSAL-...

- In the [Subclients](#) section, select the [subclient](#) you wish to backup, and click on [Backup](#)

Subclients Backup Backup history Add subclient

Name	Latest backup time	Plan
ArchiveLog	Jun 12, 2020 2:46:11 PM	FE-UNIVERSAL-7days-PARIS
default	Never backed up	FE-UNIVERSAL-7days-PARIS

- Select the [backup level](#) (see the [Backup Definition](#) section) you wish to run then press [Ok](#)

Backup options

Backup level

☐ Full

☒ Incremental

- For further details, click on the [View job details](#) link

Backup started for job {0} 74582

[View job details](#)

On-Demand Backup of Hyperscalers Applications

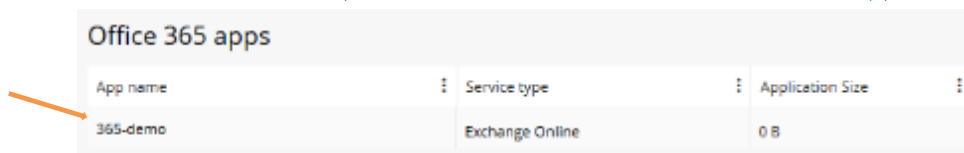
Exchange Online Mailbox

To perform a manual MS 365 mailbox backup:

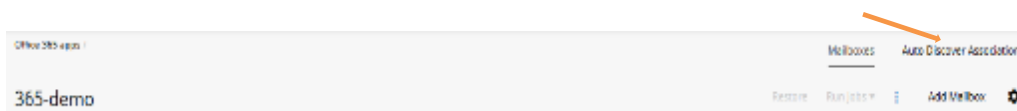
- In the [FAB Backup console](#), [Solutions / Office 365](#) section, select the [App / Exchange client](#) name
- Select the **mailbox** to back up, click on [Run jobs](#) then click [Backup](#)



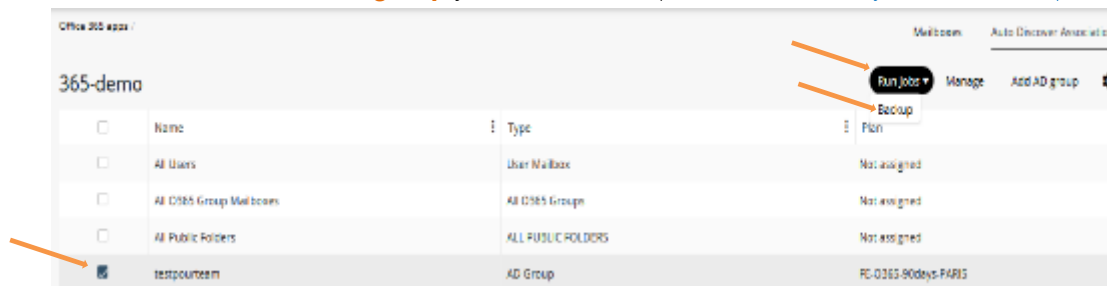
- For further details, click on the [view job details](#) link and then on the [job ID](#)
- (Optional) You may want to run the backup on a whole AD group:
 - In the [FAB Backup console](#), [Solutions / Office 365](#) click on the [App name](#)



- Click on [Auto Discover Associations](#)



- Select the **AD group** you want to backup and click on [Run jobs](#) then [Backup](#)



- For further details, click on the [view job details](#) link and then on the [job ID](#)

Restores

A restore operation is the way to lookup into the backup content and restore Files/Folders, Databases, or Applications at a given Recovery point, determined by the backup runs.

Note: Restores are only possible when backups have run

This chapter develops the Restores within FAB for each possibility offered.

Recovery Point

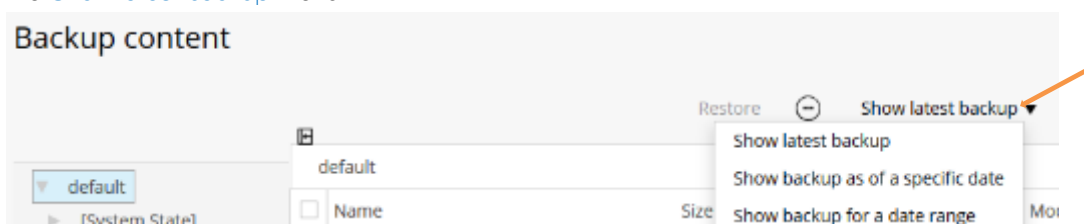
There are 2 options for restoring data:

- 1- Restore [the latest backup](#) (by default)
- 2- Restore [to a specific date](#)

“Restore the latest backup” being the default option, the following section is to describe how to select a different point in time; and therefore how to restore to a different date:

During any restore process (detailed in following sections), you will access the [Backup content](#) page:

- Develop the [Show latest backup](#) menu



- Select the [Show backup as of a specific date](#) option **if you know the date to restore to**
- Select the [date](#) and press **OK**

To time

◀

April 2019

▶

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	01	02	03	04	05	06
07	08	09	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

02

:

53

PM

- Select the [Show backup for a date range](#) option if you don't know the date to restore to

From time

◀

April 2019

▶

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	01	02	03	04	05	06
07	08	09	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

02

:

54

PM

To time

◀

April 2019

▶

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	01	02	03	04	05	06
07	08	09	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

02

:

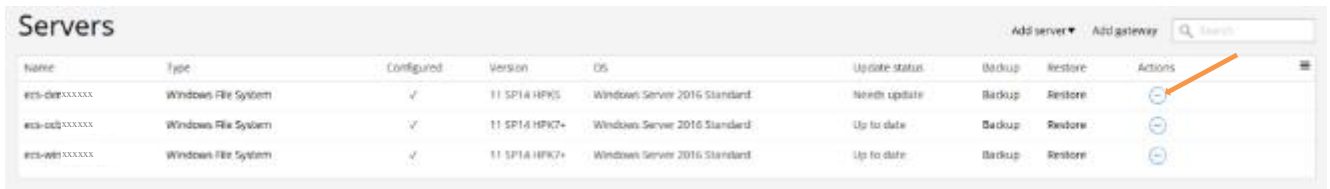
54

PM

- Select the [date range](#) for the restore and press [OK](#)
- Then follow the restore process detailed below

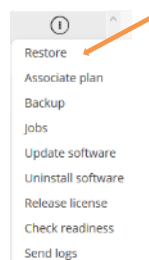
Restore Files and Folders

- In the [FAB Backup console](#), [Solutions / Servers](#) section, determine the [server](#) on which the concerned files/folders were backed up, and click on the [actions](#) button



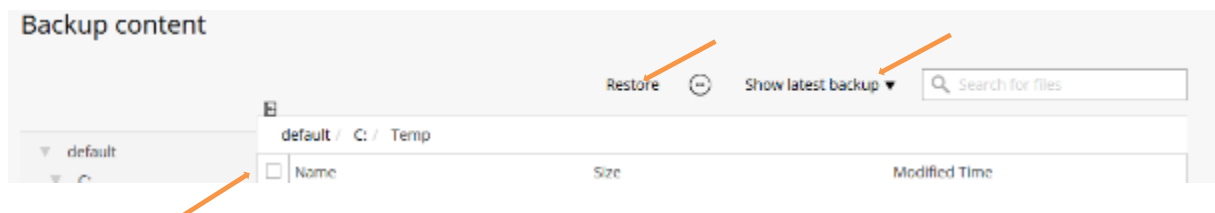
name	Type	Configured	Version	OS	Update status	Backup	Restore	Actions
ers-defxxxxx	Windows File System	✓	11 SP14 HPR5	Windows Server 2016 Standard	Needs update	Backup	Restore	⋮
ers-defxxxxx	Windows File System	✓	11 SP14 HPR7+	Windows Server 2016 Standard	Up to date	Backup	Restore	⋮
ers-defxxxxx	Windows File System	✓	11 SP14 HPR7+	Windows Server 2016 Standard	Up to date	Backup	Restore	⋮

- Click on [Restore](#)



The [backup content](#) page opens:

- Select the desired [recovery point](#) (see chapter "[Recovery Point](#)" for further detail on the date & time selection)
- Select the [content to restore](#) by checking the required boxes, and click on [restore](#)



Note: You may restore a complete folder, or select each file required

- Select the [Restore Options](#) and click on [Submit](#) to initiate the Restore

Restore options

Destination client

XXXXXX

☒ Restore data instead of stub
☒ Restore to original folder

Destination path

Browse

☐ Unconditionally overwrite if it already exists

☐ Impersonate user

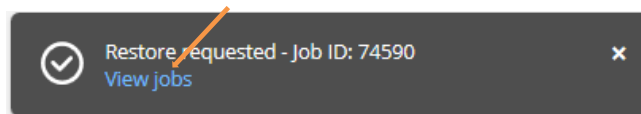
Cancel

Submit

Notes:

- By default, the “[Restore to original folder](#)” option box is checked
- Files may be restored to a different path or a different device by choosing the destination client and Destination path
- you can overwrite existing ones by checking the box “[Unconditionally overwrite if it already exists](#)”

- If you require further details, click on the [View jobs](#) link



Restore a Microsoft Exchange Database (DAG)

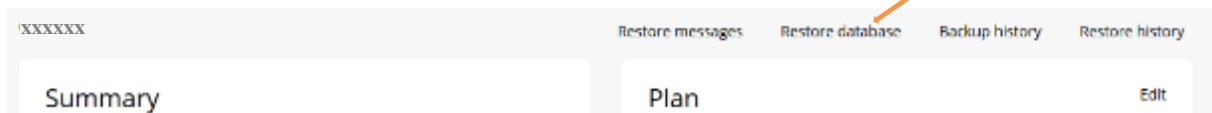
- In the [FAB Backup console](#), [Solutions / Applications / Exchange](#) section, click on the [Exchange Database](#) you wish to restore

Exchange							Restore	Disable Client	Add	
<input type="checkbox"/>	Name ↑	Type	Mailboxes o...	Application s...	Last job run time	Server plan				
<input type="checkbox"/>	XXXXXX	Exchange Datab...	4	585.83 GB	Feb 16 2020, 8:08:42 PM	FE-SERVER-14Day-5Wee...				

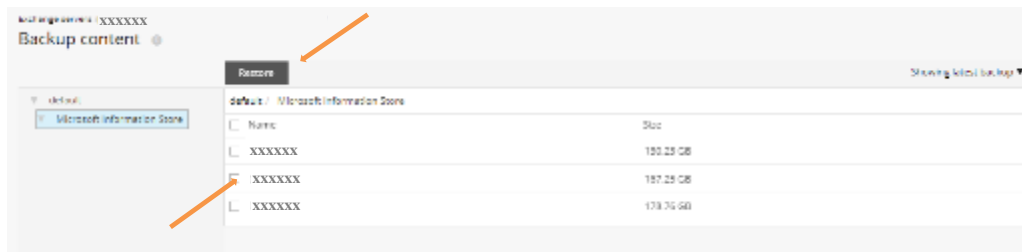
- In the [Subclients](#) section, click on the [subclient](#) to restore

Subclients				Restore offline DB messages	Add subclient	Search
Name ▲	Last backup time	Last backup size	Actions			
XXXXXX	Feb 16, 8:08:42 PM	6.41 GB				

- In the Subclient page, click on [Restore database](#)

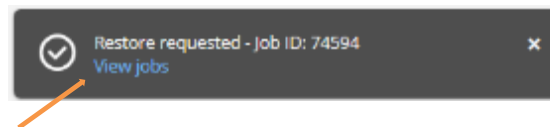


- In the [Backup content](#) section, select the desired [recovery point](#) (see chapter “[Recovery Point](#)” for further detail on the date & time selection)
- Then select the [content](#) to restore by checking the corresponding box and click on [Restore](#)



The restore job starts

- If you require further details, click on the [View jobs](#) link

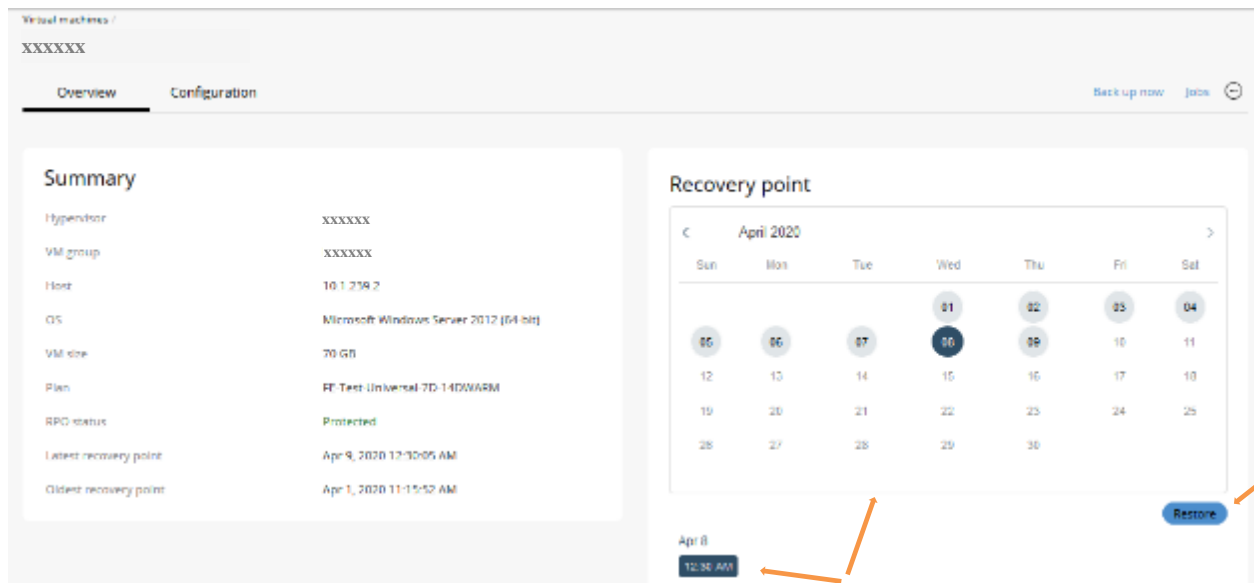


Restore Virtual Machines

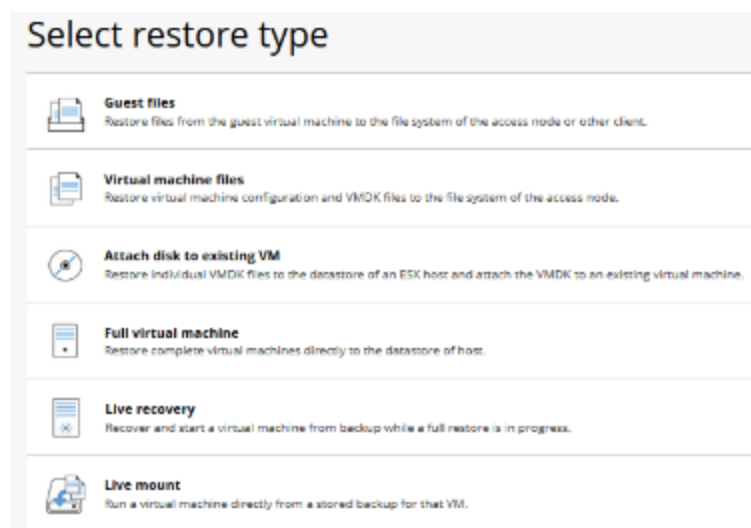
Single VM Restore

To perform a manual restore of a single VM:

- In the [FAB Backup console](#), under the [Solutions / Virtualization](#) section, click on the [Virtual machines](#) tab
- from there click on the [VM name](#) you wish to restore
- Select the recovery point amongst the available backup occurrences ready for restore and then click [Restore](#)



- In the [Select restore type](#) window, click on the required restore type
Each option is described below to guide you in the selection process:

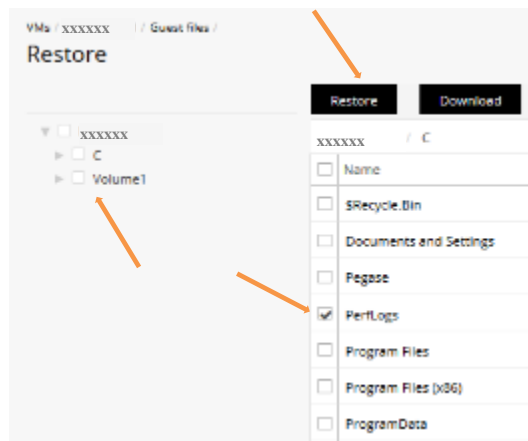


Guest files:

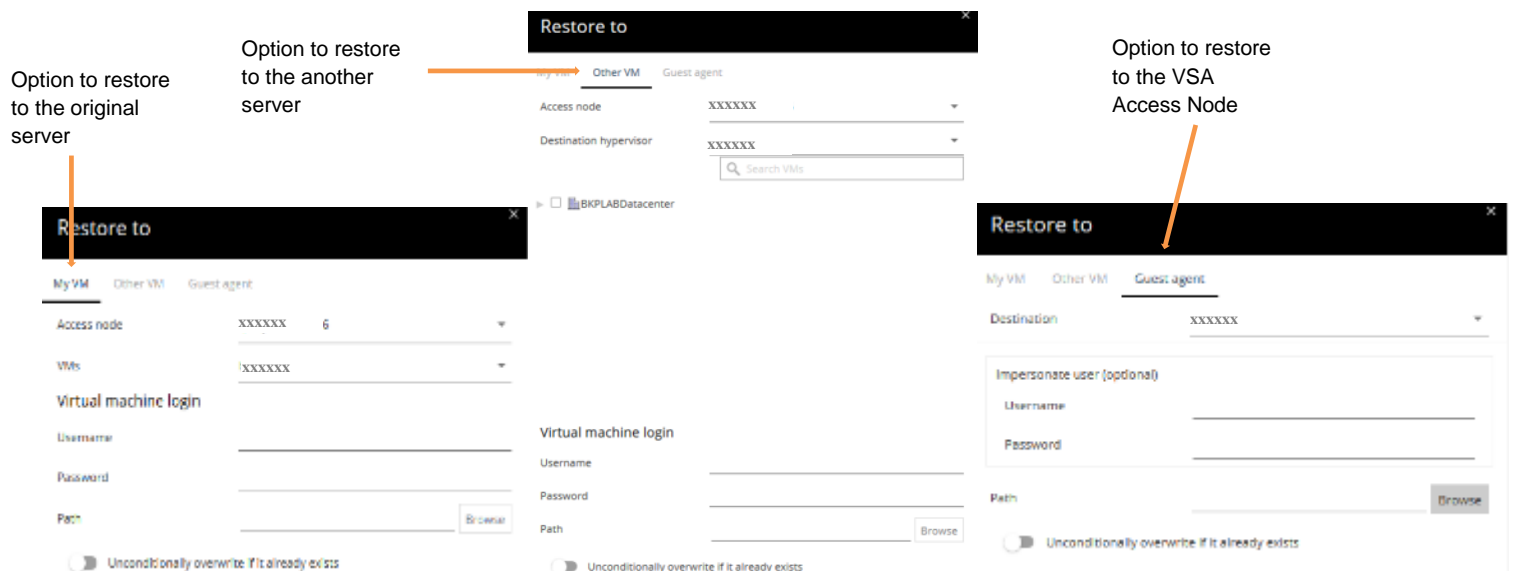
Restore files or folders from a virtual machine either to the original VM or to another one.

Note: Windows VSA server can only restore windows VM files

- In the restore window, browse and select the [files or folders](#) to restore and click [Restore](#)



- In the [restore to](#) window, choose [My VM](#) (to restore to original server) or [other VM](#) (to restore to another VM) or [Guest agent](#) (to restore to the VSA Access Node), and provide the user credentials for that server. Then click [Submit](#)



- The restore job starts. For further details, click on the [View jobs](#) link.

Virtual machine files:

Restore VMware files of a virtual machine.

Note: Useful when a VM is running but one of its disks reports errors or some configuration has changed...

- In the [Restore](#) window, browse and select the [VM files](#) and click [Restore](#)
- In the [Restore options](#) window, browse the destination path on the access node where the files would be restored and provide credential for the VM and click [Submit](#)

Attach disk to existing VM:

Restore a disk from one VM to either the original VM or to another

- In the [Restore](#) window, browse and select [the disk](#) and click [Restore](#)

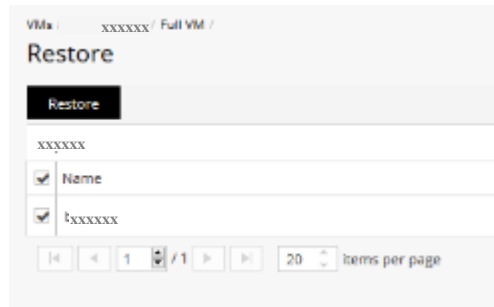
- In the restore options window, browse the [Destination VM](#) and [Datastore](#) (where the disk will be restored), and click [Submit](#)

- For further details, click on the [View jobs](#) link.

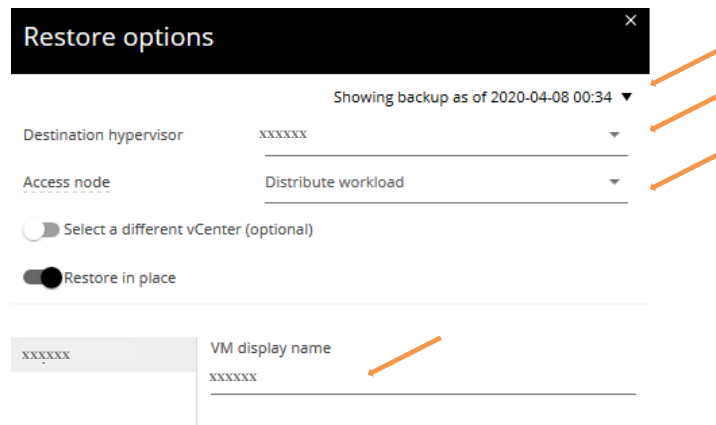
Full Virtual Machine:

Restore complete virtual machine.

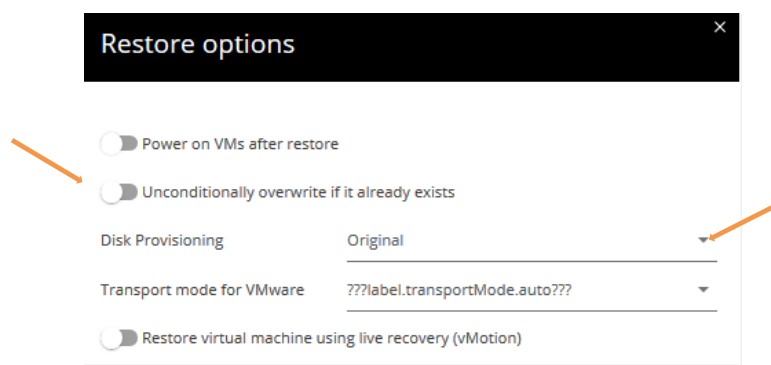
- In the [Restore](#) window, browse to select the [VM](#) and click on [Restore](#)



- In the first [Restore options](#) window, define the [Destination hypervisor](#), [Access node](#), the restored [VM name](#) (either same or different name) and the [Recovery point](#) ; then click [Next](#)



- In the second [Restore options](#) window, choose the [Disk Provisioning](#) type and the [Overwrite VM condition](#) you desire ([overwrite existing VM or not](#)) and click [Submit](#)

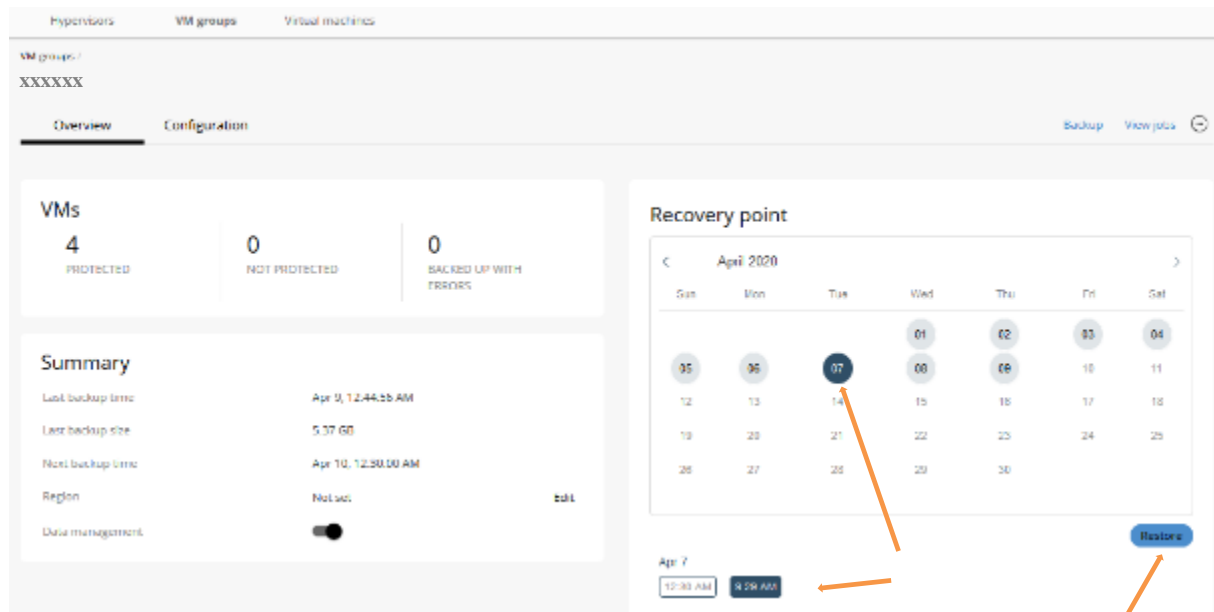


VM Groups Restore

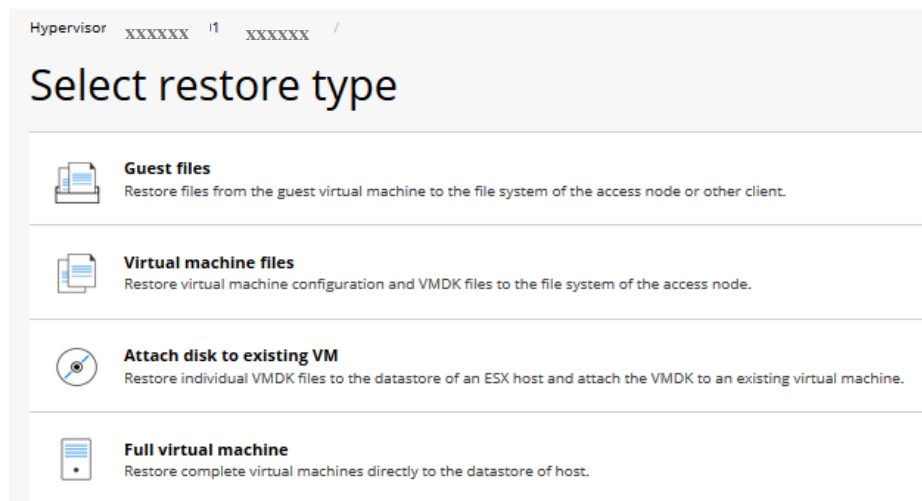
To perform a restore of multiple VMs use the VM groups Restore as follows:

Note: Multiple VM restores may require an adequate network bandwidth as the volume of data to transfer may be important

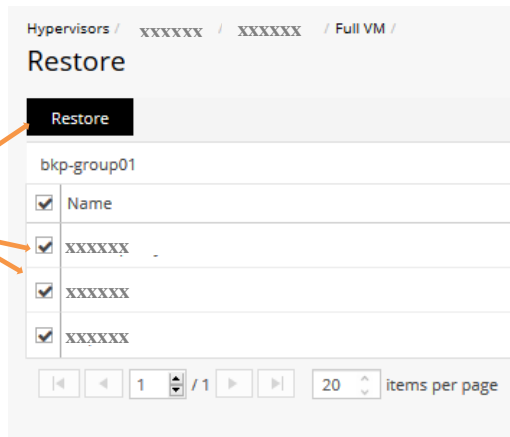
- In the [FAB Backup console](#), under the [Solutions / Virtualization](#) section, click on the [VM groups](#) tab, from there click on the [VM group](#) name to restore



- Select the [recovery point](#) (calendar date & backup time) and then click [Restore](#)
- In the [Select restore type](#) window, click on the [Full virtual machine](#)



- In the [Restore](#) window, select the [VMs](#) to restore by checking their corresponding boxes, and click [Restore](#)

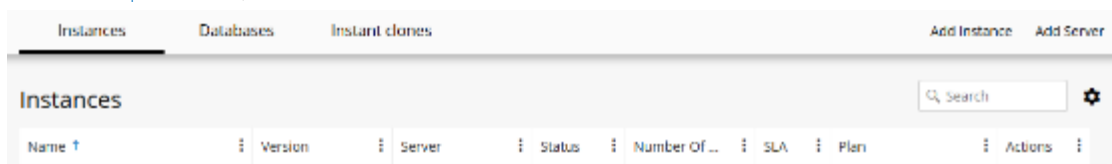


- For further details on the initiated restore job, click on the [View jobs](#) link.

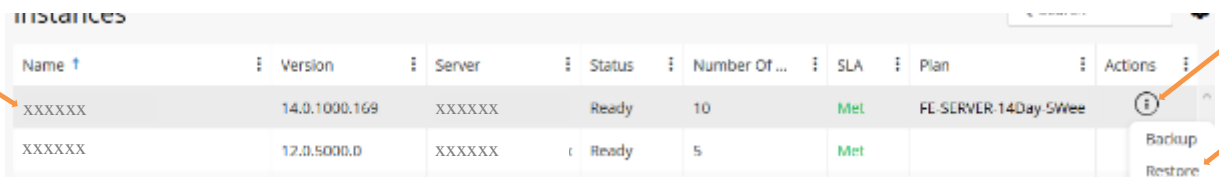
Restore Databases

Restore SQL servers Instances

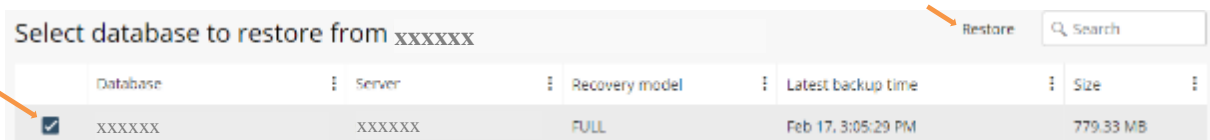
- In the [FAB Backup console](#), [Solutions / Databases / SQL Server](#) section:



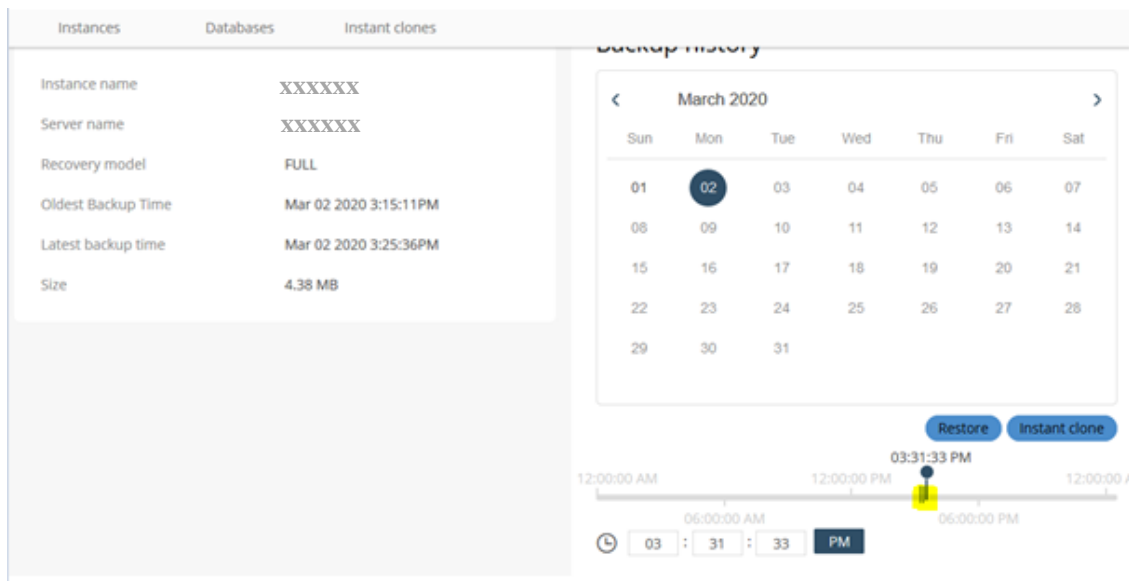
- Find the [DB Instance](#) you wish to restore, click on its [Action](#) button, and click on [Restore](#)



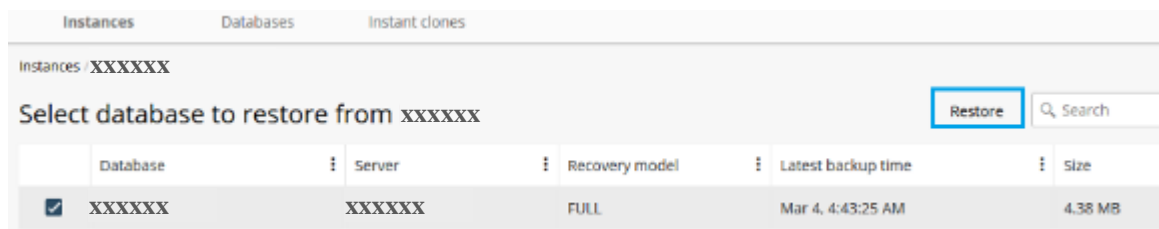
- Select the [database](#) to restore by checking the required box, and click on [Restore](#) (top right corner)



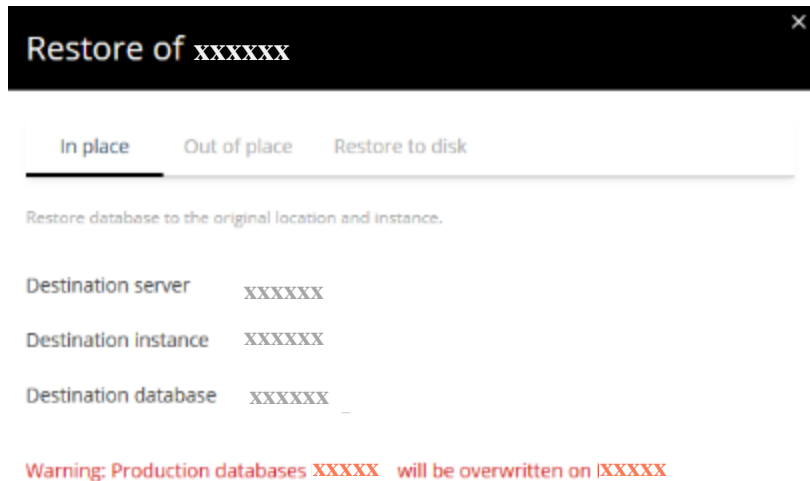
- Select the [restore point](#) either by dragging the bar or specifying the time in the required box



- In the [database selection window](#), select the DB to be restored and click on the [restore](#) button.



- Select the tab based upon the type of restore require, provide the inputs and hit submit to start restore.



- [In place restore](#) - Restores the Database on the same server and existing database is overwritten
- [Out of place restore](#) - It allows to choose the destination SQL server, destination Instance, restored DB name, data file and log file location, and recovery state.

Resxxxxxx
ok_DB

In place
Out of place
Restore to disk

Restore database using a different name, file paths or instance.

Destination server
Select a server

Destination instance
Select an Instance

Data files

xxxxxx
Destination database
xxxxxx

xxxxxx
Data file path
C:\Program Files\Micr
Browse

xxxxxx
Log file path
C:\Program Files\Micr
Browse

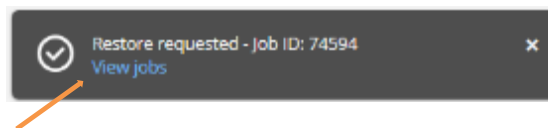
Additional options

Recovery types
☒ Recovery
☐ No recovery
☐ Stand by

Cancel
Submit

- [Restore to disk](#) - It allows restore of backed up data to a disk that is either on the same or on a different SQL Server. When you select this option, you can restore the data to the database by using third-party tools such as SQL Management Studio.

- The restore job starts once the submit button is clicked. If you require further details, click on the [View jobs](#) link.



- It would take you to the job history and here more details about the job can be viewed by clicking on job id.

Job history (Last 24 hours)										
Job Id...	Operation	Server	Agent type	Subcl...	Server group	Size	End	Elaps...	Status	
86505	Restore	xxxxxx	SQL Server		xxxxxx	10.50 MB	Mar 2, 3:45:05 ...	7 sec	Complete	

Restore Oracle Database Instances

2 possibilities are given to you in order to restore your Oracle DB environment:

Restore via the FAB Backup console

Note: Using the [FAB Backup console](#), the following data may be recovered:


- Database
- Control File
- Individual tablespaces

- In the [FAB Backup console](#), under the [Solutions / Databases / DB Instances](#) section, click on the [DB Instance](#) you wish to restore:




Name	Server	Database engine	Status	Last backup time	Size	SLA	Plan
XXXXXX	XXXXXX	Oracle	Ready	Jun 15, 2020 12:17:34 PM	12.20 GB	Met	FE-UNIVERSAL 7d...

- select the [Subclient](#) to restore, and click on [Backup history](#)




Name	Latest backup time	Plan
Archivelog	Jun 15, 2020 12:17:34 PM	FE-UNIVERSAL-7days-PARIS
default	Jun 14, 2020 11:34:41 PM	FE-UNIVERSAL-7days-PARIS

- Select the [backup job](#) to restore by clicking on its corresponding [Job Id](#) and then click [Restore](#)



Job Id	Operation	Server	Agent	Subclient	Size	End	Elapsed	Status
102141	Backup	XXXXXX	Oracle	default	2 GB	Jun 14, 11:34:41 PM	4 min 21 sec	Completed
102058	Backup	XXXXXX	Oracle	default	245 MB	Jun 14, 2:02:12 PM	3 min 24 sec	Completed
101891	Backup	XXXXXX	Oracle	default	1.87 GB	Jun 13, 2:25:58 PM	3 min 20 sec	Completed



View job details Resubmit **Restore** More actions ▼

job summary

Type	Backup type
Backup	Full
Status	Source client computer
Completed	XXXXXX
Subclient	Start time
default	Jun 13, 2020 2:25:26 PM

- Select the [tablespace](#) to restore and click on [Restore](#)



Instances / DBCOMM / XXXXXX

Backup content

Restore Showing backup from 2020-06-13 14:25:26 to 2020-06-13 14:28:58 ▼

Name	Type
<input checked="" type="checkbox"/> DATA_COMM	TABSPACE
<input checked="" type="checkbox"/> SYSaux	TABSPACE
<input checked="" type="checkbox"/> SYSTEM	TABSPACE
<input checked="" type="checkbox"/> UNDOTBS1	TABSPACE
<input checked="" type="checkbox"/> USERS	TABSPACE

- Select the restore options ([In place](#) or [out of place](#)) to modify the rest of the procedure accordingly

In Place – restore to the original server

Restore options

In place

Out of place

Destination server

xxxxxx

Destination instance

xxxxxx

Restore

Redirect

☒ Database
 ☒ Control file
 ☐ SP file

Recover to

☐ Most recent backup
 ☐ Current time
 ☒ Point in time
 ☐ SCN

06/13/2020 14:28:58

Required Database mode:
 Control file included: NOMOUNT
 Control file not included: MOUNT

Out of place – Restore to another server and another instance.

Prerequisite:

The destination Oracle server must already have an instance to overwrite with the data to restore

Restore options

In place

Out of place

Destination server
XXXXXXXX

Destination instance
Select a destination instance

Restore

Redirect

☒ Database
☒ Control file
☐ SP file

Recover to
☐ Most recent backup
☐ Current time
☒ Point in time
06/13/2020 14:28:58

☐ SCN

☐ When the job completes, notify me via email

Required Database mode:
Control file included: NOMOUNT
Control file not included: MOUNT

- Once the input has been provided click on [Submit](#), and reconfirm the restore

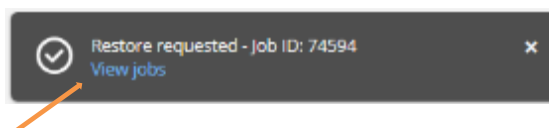
Confirm

Instance [XXXXXX] on client [XXXXXX] will be restored. Do you want to continue?

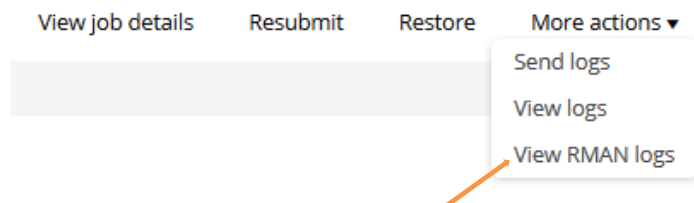
No

Yes

- The restore job starts. For further details, click on the [View jobs](#) link.



- In the [job history](#) (see the [Monitoring](#) section) further details on the job can be presented by clicking on the [job id](#). From there [RMAN logs](#) can be shown as well.



RMAN logs for the job 98197

```
Rman Script:
[ shutdown immediate;
 startup nomount;
 SET DBID 2906253482;
 run {
 allocate channel chl type 'abt_tape'
 PARMS='SBT_LIBRARY=/opt/commvault/Base/libobk.so, BLKSIZE=1048576 ENV=(CV_mmsApiVsn=2,CV_channelPar=chl,ThreadCommand
 ██████████ -cs ██████████ "
 TRACE 0;
 send " -jm 131082 -a 2:0 -cl 186 -ins 62 -at 22 -j 98197 -jt 98197:2:1 -rcp 0 -ms 1 -p 1 -df";
 restore controlfile from autobackup until time = "TO_DATE('05/19/2020 23:39:55','MM/DD/YYYY HH24:MI:SS')";
 sql 'alter database mount';
 }
 exit;
 ]
Rman Log:[
 Recovery Manager: Release 12.2.0.1.0 - Production on Thu May 21 06:26:15 2020
 Copyright (c) 1982, 2017, Oracle and/or its affiliates. All rights reserved.
 RMAN>
 connected to target database: DBCOMM (DBID=2906253482)
 using target database control file instead of recovery catalog
 RMAN>
 database closed
 database dismounted
```

Restore via RMAN in command line

Oracle Recovery Manager Interface can be used to perform restores when the Commvault interface does not support the RMAN commands or options you require. This section helps you configuring an RMAN restore by presenting you some possible use cases:

Note: Using the [RMAN command line](#), the following restores are supported:

- Full database
- Control File
- Multiple stream
- Tablespace point-in-time restore
- Redirected restore using SET NEWNAME

SBT parameters example - PARMS="SBT_LIBRARY=/opt/commvault/Base/libobk.so, BLKSIZE=1048576
ENV=(CV_mmsApiVsn=2,CV_channelPar=chl,ThreadCommandLine= -cn <your server name> -cs pbaasfepacs1)"

Some restore scenarios:

Oracle Full Databases

- Put the database in MOUNT mode.
- On the RMAN command line, run the following sample script, substituting any required or optional Oracle SBT parameter

```
run {
  allocate channel ch1 type 'sbt_tape';
  allocate channel ch2 type 'sbt_tape';
  restore database ;
  recover database;
  sql "alter database open"; }
```

Oracle Control Files

- Put the database in NOMOUNT mode.
- On the RMAN command line, run the following sample script, substituting any required or optional Oracle SBT parameter

```
run {
  set DBID <dbid>;
  allocate channel ch1 type 'sbt_tape';
  restore controlfile from autobackup ; }
```

Cross-Machine or Duplicate Restore

- Include the CvClientName or CvInstanceName environment variables for the source client name in the following RMAN restore script.

```
allocate channel ch1 type 'sbt_tape'
PARMS="SBT_LIBRARY=<software install path>/Base/libobk.so,BLKSIZE=1048576,
ENV=(CvClientName=clientname,CvInstanceName=instance_name,CvSrcClientName=sourceclient
name)";
```

Multiple Stream Oracle Restores

- Use a unique backup piece format to avoid conflicting backup piece names

```
run
{ allocate channel ch1 type 'sbt_tape'
PARMS="SBT_LIBRARY=/opt/Base/libobk.so,BLKSIZE=1048576";
allocate channel ch2 type 'sbt_tape'
PARMS="SBT_LIBRARY=/opt/Base/libobk.so,BLKSIZE=1048576";
allocate channel ch3 type 'sbt_tape'
PARMS="SBT_LIBRARY=/opt/Base/libobk.so,BLKSIZE=1048576";
restore database ;
recover database ;
sql "alter database open"; }
```

Oracle Individual Tablespace Point-in-Time restore

- Clear the Oracle Flashback area so that RMAN uses the Commvault objects when performing the restore.

```
RMAN> CONFIGURE CHANNEL DEVICE TYPE 'sbt_tape'
PARMS='SBT_LIBRARY=/opt/Base/libobk.so, BLKSIZE=1048576';

RMAN> RUN {recover tablespace test1 until time = "TO_DATE('02/12/2013 16:58:43',HH24:MI:SS)"
auxiliary destination '/u01/tspit/'; }
```

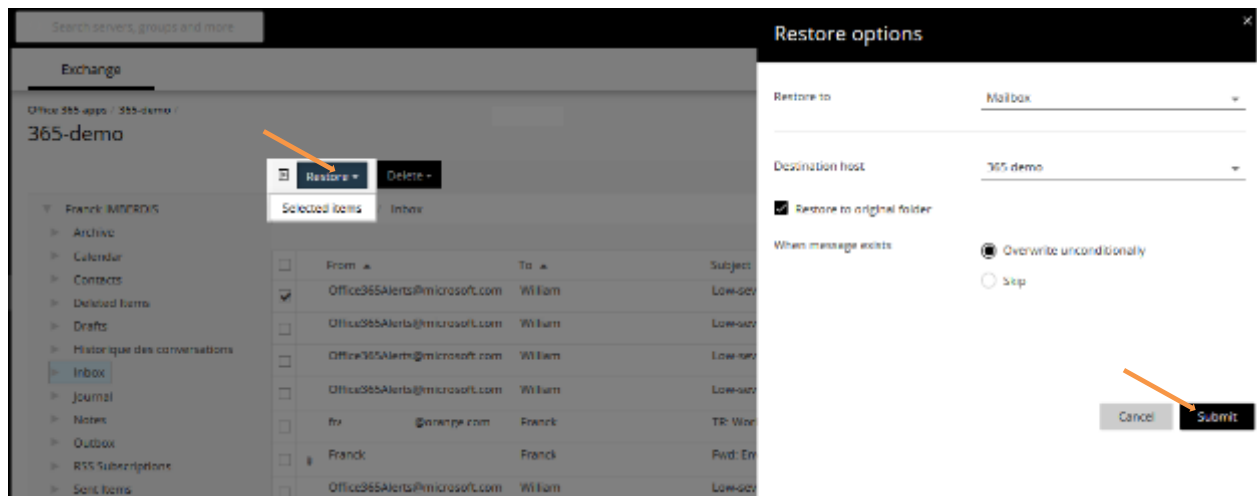
Restore Hyperscalers Applications

Exchange Online Mailbox

- In the [FAB Backup console](#), [Solutions / Office 365](#) section, click on the [MS 365 App](#) name
- Select the **mailbox** you want to restore and then click [Restore](#)



- Select the items (mails, folders, tasks, contacts etc.) to restore and click on **Restore**,
- In the [Restore Option](#) window, select the required options



- Click on [Submit](#)
- (Optional) To restore to different folder or different user mailbox (rights only with tenant admin),
 - [Uncheck](#) the Restore to original folder

Restore options

Restore to: Mailbox

Destination host: 365-demo

☐ Restore to original folder

Destination path: Browse

When message exists: ☒ Overwrite unconditionally ☐ Skip

- [Browse](#) and select the Destination path and click on [OK](#)

Restore path

- ☐ usermailbox
 - ☐ Charles-Aimé EDI
 - ☐ Demo FAB
 - ☐ Archive
 - ☒ Boîte de réception
 - ☐ Boîte d'envoi
 - ☐ Brouillons
 - ☐ Calendrier
 - ☐ Contacts
 - ☐ Courrier indésirable
 - ☐ Éléments envoyés
 - ☐ Éléments supprimés
 - ☐ Fichiers
 - ☐ Historique des conversations
 - ☐ Journal
 - ☐ Notes
 - ☐ Racine de Yammer
 - ☐ Tâches

Cancel OK

- [Click](#) Submit

Restore options

Restore to: Mailbox

Destination host: 365-demo

☐ Restore to original folder

Destination path: Demo FAB\Boîte de réception Browse

When message exists: ☒ Overwrite unconditionally ☐ Skip

Cancel Submit

- For further details, click on the [view job details](#) link and then on the [job ID](#)

Jobs Activity follow-up

Active Jobs

To gain vision on the currently active jobs:

- In the [FAB Backup console](#), go to the [Monitoring / Jobs](#) section

Job id	Operation	Server	Agent type	Subclient	Server group	Size	Start	Elapsed	Progress
65410	Backup	XXXXXX	File System	default	XXXXXX	0 B	Mar 13, 8:00:12 PM	0 sec	5%

Find here all [currently active jobs](#) (backup & restore)

- Click on a [job](#) to get further details on its process:

251472 - [Backup]

View job details Suspend Resume Kill More actions ▼

General information on the JOB → **Job summary**

Type	Backup type
Backup	Full
Current phase	Status
Scan	Pending
Progress	Source client computer
5%	XXXXXX
Subclient	Priority
default	166
Start time	Job started from
Feb 6, 2020 3:00:19 AM	Scheduled
Storage policy	Encryption enabled
FE-SERVER-6Day-4Week-AMCOR-PARIS	Unavailable

Detail on the job current status → **Job pending reason**

Waiting for the services on the client [XXXXXX] to come online.
Source: XXXXXX, Process: JobManager

Develop to get further job details → **Job details** ▼

Cancel

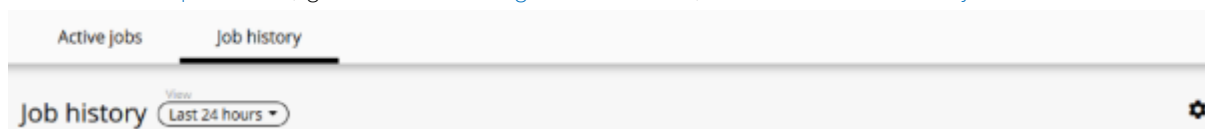
Possible actions on this job →

- Send logs
- View logs

Job history

To gain vision on the past Jobs activity:

- In the [FAB Backup console](#), go to the [Monitoring / Jobs](#) section, and click on [Job history](#)



This view lists all completed jobs.

You may click on a [job ID](#) to get further details and possible actions

Job history <small>Last 24 hours</small>											<small>Resume Suspend</small>
<input type="checkbox"/>	Job id	Operation	Server	Agent type	Subclient	Server group	Size	Start	Elapsed	Status	
<input type="checkbox"/>	74590	Restore	xxxxxx	Windows File Syst...		xxxxxx	0 B	Apr 4, 2:51:25 PM	21 sec	Completed	
<input type="checkbox"/>	74582	Backup	xxxxxx	File System	default	xxxxxx	6.98 MB	Apr 4, 2:27:07 PM	2 min 48 sec	Completed w/ one or more err	
<input type="checkbox"/>	74324	Backup	xxxxxx	File System	default	xxxxxx	5.16 MB	Apr 4, 12:03:43 AM	2 min 33 sec	Completed w/ one or more err	
<input type="checkbox"/>	74322	Backup	xxxxxx	File System	default	xxxxxx	24.90 MB	Apr 4, 12:03:43 AM	1 min 35 sec	Completed	
<input type="checkbox"/>	74319	Backup	xxxxxx	File System	default	xxxxxx	5.16 MB	Apr 4, 12:03:43 AM	2 min 32 sec	Completed w/ one or more err	
<input type="checkbox"/>	74291	Backup	xxxxxx	File System	default	xxxxxx	475.47 MB	Apr 3, 11:03:40 PM	1 min 46 sec	Completed	
<input type="checkbox"/>	74290	Backup	xxxxxx	File System	default	xxxxxx	9.53 MB	Apr 3, 11:03:40 PM	2 min 35 sec	Completed w/ one or more err	
<input type="checkbox"/>	74289	Backup	xxxxxx	File System	default	xxxxxx	9.04 MB	Apr 3, 11:03:40 PM	2 min 41 sec	Completed w/ one or more err	

Troubleshooting guide

What to do when getting an error...

Checking the logs

Logs files can be found on the host under below path:

For **Windows** : [C:\Program Files\Commvault\ContentStore\Log Files\](#)

For **Linux** : [/var/log/commvault/Log_Files/](#)

Below is the name and description of log files that can be used to troubleshoot various issues.

Log file Name	Description
Install.log	Installation log file *
clBackup.log	File System backup log file

clRestore.log	Restore log file
extidbdiscover.log	Initial Exchange DB discovery log file
extidbbackup.log	Exchange backup log file
SQLiDA.log	SQL backup log file
vsbackup.log	Virtual server agent backup log file
Vsrst.log	Virtual server agent restore log file
vsrst.log	New restore log file for Virtual server agent

* Note: For **Windows** if Log folder is not created for some reason during installation then, install log can be found in this location [C:\ProgramData\Commvault Systems\Galaxy\LogFiles\Install.log](#).

Notes: The Program Data is hidden folder ; you need to enable the Windows "show hidden folders" options

Checking the Jobs

At first, it's important to have a look at the job activity.

Look for the implied job, and check for events.

It may be relevant for deeper analysis on the jobs activity, to have a look at the events.

As explained in the **Jobs Activity follow up** chapter, you may find events related to each job within the job activity log.

Otherwise, you may also require having a more global look at the activity, by checking on all events occurring for your Company:

- In the [FAB Backup console](#), go to the [Monitoring / Events](#) section

Events All ▾ Search							
Severity	Event ID	Job ID	Date	Program	Computer	Event co...	Description
xxxxxx	xxxxxx	xxxxxx	Date & Time	Source program	Agent name	xxxxxx	Event description with detail

Depending on the case, and for further analysis, acquiring the job logs could be interesting (see the **Active Jobs** chapter).

Here follows a list of possible encountered errors and the action to be taken

Error	Action to be taken
Source could not start the command	Check the network settings on the source computer
Destination could not start the command	Check the network settings on the destination computer

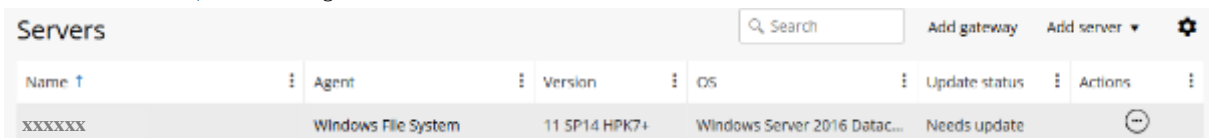
Services on destination are down	Make sure that the necessary services are up and running on the destination client computer (see Client Backup Services section)
Services on source are down	Make sure that the necessary services are up and running on the source client computer (see Client Backup Services section)
Connect timed out	Check the connectivity between the source and destination computers in this message and make sure that you can ping these computers from one another
Job Result Folder has low capacity	Increase capacity
Base Folder has low capacity	Increase capacity
Authentication failed	Make sure the proper authentication was used
Firewall connect failed. Source client </> is not listed in the firewall config file.	Make sure that the firewall config file is correct and check if this client is listed in the file

Check readiness

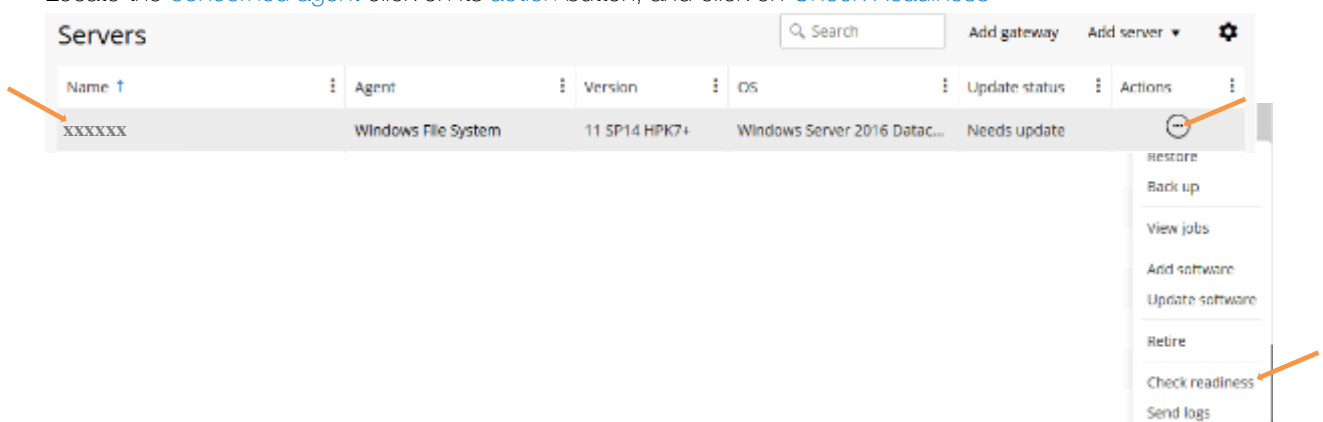
Often backups are pending due to a lack of communication between the FAB infrastructure and the agent located on the client to backup.

Such communication may be verified through the check readiness command:

- In the [FAB Backup console](#), go to the [Administration / Servers](#) section



- Locate the [concerned agent](#) click on its [action](#) button, and click on [Check Readiness](#)



- Wait for the operation to complete and look for possible errors reported

Check readiness

Show details Check readiness

Check readiness on:

☒ Network
 ☒ Resource/Capacity
 ☐ Include disabled entities
 ☐ Application check
 ☐ Additional resources

Client connectivity for xxxxxx

Name	Status	Reason
Client	Not Ready.	1. Communication failure between CommServe and Client xxxxxx . Error returned is:Connect failed. 2. Communication failure between CommServe and MediaAgent xxxxxx . Error returned is:Connect failed. 3. Deduplication Database is offline.4. MediaAgent xxxxxx is offline. 5. Mount Path [xxxxxx] ca-object is offline.
MediaAgent	Not Ready.	

Feedback

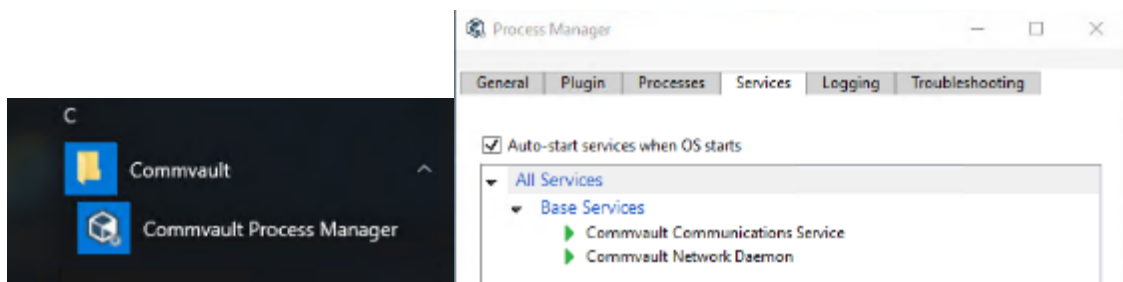
Client Backup services

Backup services on the clients have to be up and running for any backup & restore operation. Below is the list of services (name, process, description and log files).

Windows Service Name	Processes (Linux / Windows)	Description	Log file
Commvault Communications Service (GxCVD)	CVD	Base Service, Provides the ability to fetch or save metadata on the CommServe when backup or restore are in progress.	CVD.log
Commvault Network Daemon (GxFWD)	Cv fwd	File System backup log file	Cv fwd.log
Commvault Client Manager Service (GXCIMGrS)	CIMGrS	Responsible for archiving or recovering the files	CIMGrS.log
	cvlaunchd	Linux Process only - Responsible for spawning Commvault processes	cvlaunchd.log

On your **Windows** devices, the FAB service management is made as follows :

Open the Windows Start menu -> expand the Commvault start menu folder -> click on Commvault Process Manager -> go to services tab.



From this pane, your client services can be started, stopped, and restarted using the button at the bottom.



On your **Linux** devices, , the FAB service management is made as follows :

Verify services:

Run the `commvault -all list` as root user

```
[root@ecs-worker-01 ~]# commvault -all list

*** Instance001, sbaasfepa3bkp ***
+-----+-----+-----+
| Service | PID   | Description                               |
+-----+-----+-----+
| cvlaunchd | 11926 | Commvault Launch Daemon                 |
+-----+-----+-----+
| cvd       | 11927 | Commvault Communications Service         |
+-----+-----+-----+
| ClMgrS    | 11928 | Commvault Client Event Manager          |
+-----+-----+-----+
| cvfwd     | 11930 | Commvault FireWall Daemon               |
+-----+-----+-----+
```

To stop service run `commvault -all stop` as root user

To start service run `commvault -all start` as root user

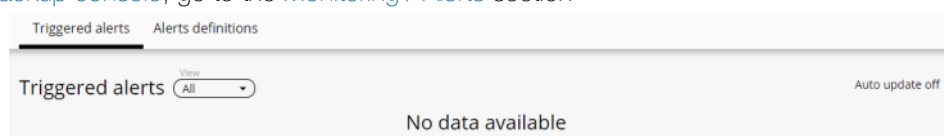
To restart service `commvault -all restart` as root user

Looking for alerts

FAB logs all alerts set for you Company.

When analyzing an error, it could be relevant to have a look at the alerts:

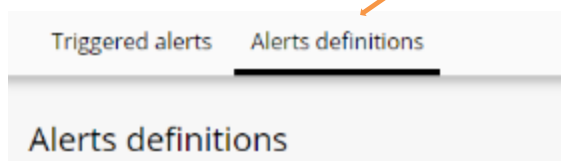
- In the [FAB Backup console](#), go to the [Monitoring / Alerts](#) section



Notes: The “No data available” message indicates that no alert was sent the past 7 days

You may subscribe to pre-defined alerting policies:

- In [Monitoring / Alerts](#) section, click on [Alerts definitions](#)



- Click on the Alert definition you wish to setup

The screenshot shows the 'Alerts definitions' table with the following data:

Name ↑	Type	Company	Enabled
Backup job failed	Data Protection	XXXXXX	<input checked="" type="checkbox"/>
Backup job succeeded	Data Protection	XXXXXX	<input checked="" type="checkbox"/>
Restore job failed	Data Recovery	XXXXXX	<input checked="" type="checkbox"/>
Restore job succeeded	Data Recovery	XXXXXX	<input checked="" type="checkbox"/>

- In the [Alert target](#) section, click on [Edit](#)

The screenshot shows the 'Alert target' section for the 'Backup job failed' alert. It includes fields for 'Send alert to' (Email), 'Recipients' (To, Cc, Bcc), and 'Entities' (Server groups, Servers). An orange arrow points to the 'Edit' button.

- Select the [options](#) you require and click on [Save](#)

The screenshot shows the 'Edit alert target' dialog box with the following options:

Send alert to

- ☒ Email
- ☐ Console
- ☐ Event viewer
- ☐ SNMP

Recipients

To: Enter user(s), user group(s) or email

Cc: Enter user(s), user group(s) or email

Bcc: Enter user(s), user group(s) or email

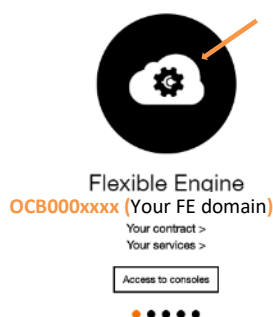
Buttons: Cancel, Save

Notes: Make sure your desired alerts are enabled in the Alerts definitions section (checkbox [Enabled](#))

How to contact the FAB support...

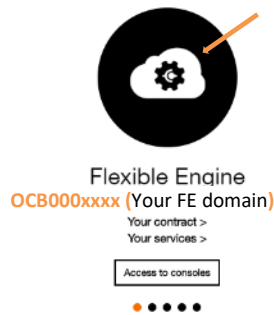
For any further help you may require contacting us...

- Connect to your [Cloud store](#), and click on your required [Flexible Engine domain](#)
<https://selfcare.cloud.orange-business.com/>



- Go to the [Support](#) section and follow the provided instructions depending on your need





- Go to the [Services](#) section and click on Manage your change requests



FAQ

Which agent to choose for a standard Windows server backup?

- The agents for Files and Folders on Windows Server are named FS-Agent_WinXxx where xx represents the OS Architecture type, i.e. either 32 (x86) or 64 bits

Which agent to choose for protecting my Microsoft Exchange Database?

- To deploy the FAB agent for Microsoft Exchange, the agent to download is: Apps-Agent_WinX64

Which policy should I use for saving my files to Paris and to Amsterdam?

- In order to protect your data in Paris and Amsterdam with the same policy, you are given the possibility to use any policy named:
XXXXXXXXXXXXX- PARIS + AMSTERDAM

Notes: Various policies exist with such naming, depending on the data retention period you wish to apply for your data protection

