

Ensim Unify Integration Manual

Manual for BackupAgent for service providers using Ensim Unify (version 3.10.1)

1. BackupAgent in Unify

Ensim Unify has integrated BackupAgent as a platform into their flagship product Unify 4.5. Service Providers who use Unify can now easily roll-out online backup services using BackupAgent and provision those services in Unify. This shortens time-to-market significantly and increases possible margins and return-on-investment.

1.1 Seamless integration

The integration was due to popular demand by Unify customers. Since BackupAgent supports authentication and provisioning using Active Directory, integrating BackupAgent's services with Unify is a straightforward and seamless effort.

1.2 Easy provisioning

Service Providers can provision BackupAgent subscriptions and add custom subscription plans using Unify as a central provisioning platform. This functionality is also available for resellers within a Unify platform. To enable provisioning for BackupAgent, customers can install the BackupAgent Service Manager in their operational Unify platform.

2. About Ensim Unify

Founded in 1998, Ensim Corporation is a leading provider of infrastructure management software for the enterprise and service provider industries. Ensim products are used to enable integrated solutions that secure, simplify, and automate complex environments and increase IT department and user productivity. Ensim Unify enables access control, identity management, change management, automated provisioning, reporting and auditing, password and role management, along with delegated administration and device/client configuration.

- Pre-built full function connectors include:
- Active Directory
- MS Exchange
- Blackberry
- MS SharePoint
- MS Office Communicator (OCS)
- Windows Hosting (IIS)
- MS SQL Server
- BackupAgent
- and many more...

The Unify Service Manager SDK allows Ensim Unify's capability to manage and control virtually any application, on premise or in the cloud. Ensim is a Microsoft Gold Certified partner in multiple disciplines and maintains strategic partnerships with many leading vendors.

3. Installation

3.1 Installing the BackupAgent Service Manager

Installing the BackupAgent Service Manager is similar to installing any other Service Manager in Unify. The BackupAgent Service Manager comes with two setups:

- BackupAgentPESetup.msi: Setup for installing Provisioning Engine
- BackupAgentCPSetup.msi: Setup for installing Control Panel and Web Services

While installing please follow these instructions:

- The BackupAgentPESetup.msi should be installed prior to installing the BackupAgentCPSetup.msi.
- Deactivate the Provisioning Engine in both the Component Service console and the Provisioning Manager
- When installing the BackupAgentCPSetup.msi please choose the 'Ensim_Unify' application pool instead of the default application pool.

Note: The only prerequisite for installing the BackupAgent Service Manager is a running Ensim Unify platform.

Currently there are three known issues that can occur in specific circumstances:

1. During the installation of the BackupAgentPESetup.msi an error popup is displayed at the end of the installation stating 'Service cannot be found in DB'. When this occurs you should:
 - Finish the setup
 - Uninstall the BackupAgentPESetup
 - Install the BackupAgentPESetup again
2. The second known issue is that the 'BackuAgent.EnsimSM.WebService.dll' file is not copied to the 'C:\Program Files\Ensim\Ensim Unify\Web Services\BackupAgent\bin' folder, but only to the 'C:\Program Files\Ensim\Ensim Unify\Web Services\BackupAgent\bin\bin\' folder. To resolve this issue, make sure that the file is in both folders.
3. Finally, the BackupAgent icon will not show correctly in some places of the Control Panel. To resolve this issue please copy the 'BackupAgent.GIF' file
from: 'C:\Program Files\Ensim\Ensim Unify\CP\ispadmin\ServiceComponents\
BackupAgentServiceComponent'
to: 'C:\inetpub\wwwroot'.

3.2 Prerequisites for using the BackupAgent Service Manager

The only requirement for using the BackupAgent Service Manager is that a licensed BackupAgent server installation is running within the active domain for Ensim Unify. The BackupAgent installation should also be configured in such a way that it is linked to Active Directory which Unify uses to provision organizations and users.

4. Provisioning

4.1 Adding a resource

The first step to take when configuring BackupAgent in Unify is to create a resource that links to an existing BackupAgent installation in the domain. The first step lets you name the resource and select a resource pool:

server information	
host name:	<input type="text" value="demoserver"/> *
description:	<input type="text" value="demo server"/>
use in automatic allocation:	<input checked="" type="checkbox"/>
pool assignment	
select pool:	<input checked="" type="radio"/> Add Server to Existing Pool <input type="text" value="base pool"/>
	<input type="radio"/> Create Pool for Server <input type="text"/>
service installed on server	
choose service:	<input checked="" type="radio"/> BackupAgent

* indicates a required field

The host name in this view does not have to match any existing host name in the subsystems. Fill in an appropriate name and click 'Next'. The next view will show:

backupagent			
	resource type	limit	actual
<input checked="" type="checkbox"/>	Online backup	Number of Organizations [#]	
		<input checked="" type="radio"/> <input type="text" value="0"/> <input type="radio"/> Unlimited	<input type="text" value="0"/>
	Server Backup users	<input checked="" type="radio"/> <input type="text" value="0"/> <input type="radio"/> Unlimited	<input type="text" value="0"/>
	PC Backup users	<input checked="" type="radio"/> <input type="text" value="0"/> <input type="radio"/> Unlimited	<input type="text" value="0"/>
	Disk space [GB]	<input checked="" type="radio"/> <input type="text" value="0"/> <input type="radio"/> Unlimited	<input type="text" value="0"/>

This view shows all available service quotas for BackupAgent:

- Number of organizations that are allowed to be provisioned to this resource
- Maximum number of server backup users
- Maximum number of pc backup users
- Maximum disk space available on this resource (in gigabytes)

Once these quotas are set, continue to the next view by clicking 'Next':

backupagent 3.10.1
online backup

licensed server name (https://...):	<input type="text"/>	* ?
branded service name:	<input type="text"/>	* ?
id of current storage target (e.g. 1002):	<input type="text"/>	* ?
smtp email server:	<input type="text"/>	* ?
support e-mail address:	<input type="text"/>	* ?
download link for client software (http://...):	<input type="text"/>	* ?
link to support page (http://...):	<input type="text"/>	* ?
link to terms and conditions (http://...):	<input type="text"/>	* ?
link for users to obtain upgrades (http://...):	<input type="text"/>	* ?
alternative link to managementconsole (http://...):	<input type="text"/>	?
backupagent system admin password:	<input type="text"/>	* ?

In this view you link the resource in Unify to an actual BackupAgent installation. For this you have to fill out the following fields:

Licensed server name:	This should be the server URL for the BackupAgent installation (e.g. https://backup.yourcompany.com)
Branded service name:	This is the brand name of your service. This name will also be used in BackupAgent status report e-mails.
ID of current storage target:	This is the ID of a storage target as it exists in the BackupAgent configuration (e.g. 1002). Within BackupAgent you can add storage targets and they get an ID when added.
Smtp email server:	This is the e-mail server the BackupAgent Service Manager will use to send welcome e-mails once an organization or user is provisioned. This should be a DNS or IP address (e.g. 'mail.yourcompany.com' or '10.10.0.25').
Support e-mail address:	This is the sender e-mail address for welcome e-mails.
Download link for client:	This is the download link URL to the branded client software for BackupAgent.
Link to support page:	This is the URL where users should go in case they need support.
Link to terms and conditions:	This is the URL where users should go to read terms and conditions that apply to the BackupAgent service.

Link for upgrades:	This is the URL where users should go to obtain upgrades of their service plan.
Management console:	This is the URL of the management console. By default this is 'https://backup.youronlinebackup.com/managementconsole'. Leaving this blank will result in the BackupAgent Service Manager to generate it based on the licensed service name.
Admin password:	This is the password of the 'administrator' user of the BackupAgent system. The BackupAgent Service Manager requires this password to be able to provision users and organizations.

Fill out these fields according to your current BackupAgent configuration settings. If you have done this correctly, you can click 'Finish' and the resource will be created in Unify. In case you type in a wrong value for 'licensed server name', 'storage id' or 'admin password', you will receive an error message.

Note: If you create more storage locations in BackupAgent you need to define a resource for each storage location in Unify.

4.2 Provisioning BackupAgent for an organization

Once you have assigned a BackupAgent resource to a resource pool you can provision BackupAgent to organizations. You can add BackupAgent as a service. In that case you have to fill in the information for the 'online backup' ServiceComponent:

backupagent 3.10.1
general for service

online backup

backup disk space (gb): 2500 Unlimited Actual*

pc backup users: 50 Unlimited Actual*

server backup users: 4 Unlimited Actual*

backup administrator upn: *

backup administrator e-mail:

* indicates a required field

Here you need to specify five configuration items:

Backup disk space:	Total disk space for this organization to divide amongst users
Pc backup users:	Number of users that can obtain a PC backup service
Server backup users:	Number of users that can obtain a backup service for servers
Backup administrator upn:	User principal name of existing users for administering backups (e.g.admin@yourcustomer.com)
Backup administrator e-mail:	Alternative e-mail address for this user to receive e-mail notifications. In case the user has an Exchange mail address, this setting is not required.

Once you have specified all items for this organization you can click 'Finish' to start provisioning the BackupAgent service to this organization.

Afterwards you can also edit these settings by selecting BackupAgent service for the organization by clicking the 'Edit' button. Clicking on 'Overview' will also display the appropriate landing pages for the BackupAgent service.

4.3 Provisioning BackupAgent for a user

If BackupAgent is provisioned to an organization, the administrator of that organization can provision BackupAgent services to end-users:

* indicates a required field

When adding the BackupAgent service for a user, the organization administrator sets the following configuration items:

Backup disk space:	The total amount of disk space the user can use for storing backup data.
User type:	Either PC or Server. These options are only shown in case an organization has 'PC' or 'Server' backup user quota.

User e-mail address:	Alternative e-mail address for this user to receive e-mail notifications. In case the user has an Exchange mail address, this setting is not required.
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Note: An ISP administrator will have an additional setting 'Bandwidth limitation', which can be set to limit the bandwidth consumption of a user while using BackupAgent and uploading data. This is not visible for organization administrators as shown in the screenshot.

Afterwards you can also edit these settings by selecting BackupAgent service for the user by clicking the 'Edit' button. Clicking on 'Overview' will also display the appropriate landing pages for the BackupAgent service.

5. Web Services

The BackupAgent Service Manager also comes with web services for provisioning organizations and users. With these web services partners can directly provision BackupAgent services through Ensim without having to use the Control Panel. This web service is exposed on the following URL or the public equivalent of it:

- <http://localhost/unifyws/BackupAgent/BackupAgentWebService.aspx>

5.1 Available functions for provisioning

The following functions are available through this web service for provisioning:

- AddOrgService
- AddUserService
- RemoveOrgService
- RemoveUserService
- UpdateOrgService
- UpdateUserService

The web service also exposes other functions, which are not documented or implemented for provisioning. All functions require an AuthInfo object. Within the AuthInfo object you only have to specify the username (e.g. admin@yourISP.com) and password.

To access AddOrgService, UpdateOrgService and RemoveOrgService, you have to add credentials with ISP or Reseller access. To access AddUserService, UpdateUserService and RemoveUserService, you have to add credentials with the organization access (e.g. admin@yourcustomer.com).

Per function you need to add specific elements to the soap envelope to create a well-formed request. (See paragraphs below.)

5.1.1 AddOrgService

This function provisions BackupAgent for an organization. For this function you need to add:

domainname:	a setting with the domain name of the organization as value
baorgconfig:	<p>At least one baorgconfig element, including one myOrganizationConfig element containing:</p> <ul style="list-style-type: none"> • Version as a setting with ‘3.10.1’ as a value • Diskspace as an element with Limit and Actual as a setting (set Actual to 0) • PCBackupUsers as an element with Limit and Actual as a setting (set Actual to 0) • ServerBackupUsers as an element with Limit and Actual as a setting (set Actual to 0) • BackupAdministratorUPN as a setting • BackupAdministratorEmail as a setting
poolinfo:	One poolinfo setting with the name of the resource pool to provision to (e.g. ‘Base Pool’)

Calling this function correctly will result in an empty SOAP response. In case an exception occurred, the SOAP response will contain the exception information for handling.

5.1.2 AddUserService

This function provisions BackupAgent for a user. For this function you need to add:

username:	The username as a setting with the username (e.g. user@yourcustomer.com) as value
bauserconfig:	<p>One bauserconfig element, including one myUserConfig element containing:</p> <ul style="list-style-type: none"> • Version as a setting with ‘3.10.1’ as a value

	<ul style="list-style-type: none"> • Diskspace as an element with Limit and Actual as a setting (set Actual to 0) • UserType as setting with either 'typeHome' or 'typeProfessional' as value • Email as a setting <p>The bauserconfig element also offers BandwithLimitation as a setting, but this cannot be set and should therefore not be included in the request.</p>
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Calling this function correctly will result in an empty SOAP response. In case an exception occurred, the SOAP response will contain the exception information for handling.

5.1.3 RemoveOrgService

This function deprovisions BackupAgent for an organization, including all users that have the service. For this function you need to add:

domainname:	The domain name as a setting with the domain name of the organization as value
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Calling this function correctly will result in an empty SOAP response. In case an exception occurred, the SOAP response will contain the exception information for handling.

5.1.4 RemoveUserService

This function deprovisions BackupAgent for a user. For this function you need to add:

username:	The username as a setting with the username (e.g. user@yourcustomer.com) as value
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Calling this function correctly will result in an empty SOAP response. In case an exception occurred, theSOAP response will contain the exception information for handling.

5.1.5 UpdateOrgService

This function updates the BackupAgent settings for an organization. For this function you need to add:

domainname:	The domain name as a setting with the domain name of the organization as value
baorgconfig:	At least one baorgconfig element, including one myOrganizationConfig element containing:

	<ul style="list-style-type: none"> • <i>Version</i> as a setting with '3.10.1' as a value • <i>Diskspace</i> as an element with <i>Limit</i> and <i>Actual</i> as a setting (set Actual to 0) • <i>PCBackupUsers</i> as an element with <i>Limit</i> and <i>Actual</i> as a setting (set Actual to 0) • <i>ServerBackupUsers</i> as an element with <i>Limit</i> and <i>Actual</i> as a setting (set Actual to 0) • <i>BackupAdministratorUPN</i> as a setting • <i>BackupAdministratorEmail</i> as a setting
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5.1.6 UpdateUserService

This function updates the BackupAgent settings for a user. For this function you need to add:

username:	The username as a setting with the username (e.g. user@yourcustomer.com) as value
bauserconfig:	<p>One bauserconfig element, including one myUserConfig element containing:</p> <ul style="list-style-type: none"> • <i>Version</i> as a setting with '3.10.1' as a value • <i>Diskspace</i> as an element with <i>Limit</i> and <i>Actual</i> as a setting (set Actual to 0) • <i>UserType</i> as setting with either 'typeHome' or 'typeProfessional' as value • <i>Email</i> as a setting <p>The bauserconfig element also offers BandwithLimitation as a setting, but this cannot be set and should therefore not be included in the request.</p>

Calling this function correctly will result in an empty SOAP response. In case an exception occurred, the SOAP response will contain the exception information for handling.

5.2 Example SOAP request

Request:

```
<soapenv:Envelope xmlns:soapenv=http://schemas.xmlsoap.org/soap/envelope/
xmlns:tem="http://tempuri.org/" xmlns:com="http://ensim.com/unifyws/commontypes">
  <soapenv:Header>
    <tem:AuthInfo>
      <com:Username>admin@domain.local</com:Username>
      <com>Password>Password123#</com>Password>
    </tem:AuthInfo>
```

```
</soapenv:Header>
<soapenv:Body>
  <tem:AddOrgService>
    <tem:domainname>genesis01.com</tem:domainname>
    <tem:baorgconfig>
      <tem:myOrganizationConfig>
        <com:Version>3.10.1</com:Version>
        <tem:DiskSpace>
          <tem:Limit>500</tem:Limit>
          <tem:Actual>0</tem:Actual>
        </tem:DiskSpace>
        <tem:PCBackupUsers>
          <tem:Limit>10</tem:Limit>
          <tem:Actual>0</tem:Actual>
        </tem:PCBackupUsers>
        <tem:ServerBackupUsers>
          <tem:Limit>0</tem:Limit>
          <tem:Actual>0</tem:Actual>
        </tem:ServerBackupUsers>
        <tem:BackupAdministratorUPN>
          admin@genesis01.com
        </tem:BackupAdministratorUPN>
        <tem:BackupAdministratorEmail>
          admin@genesis01.com
        </tem:BackupAdministratorEmail>
      </tem:myOrganizationConfig>
    </tem:baorgconfig>
    <tem:poolinfo>
      <tem:PoolName>Base Pool</tem:PoolName>
    </tem:poolinfo>
  </tem:AddOrgService>
```

</soapenv:Body>

</soapenv:Envelope>

Response:

<soap:Envelope

xmlns:soap="<http://schemas.xmlsoap.org/soap/envelope/>" xmlns:xsi="[http://www.w3.org/2001/XMLSchema](http://www.w3.org/2001/XMLSchema-instance)
[hema-instance](http://www.w3.org/2001/XMLSchema)" xmlns:xsd="<http://www.w3.org/2001/XMLSchema>">

<soap:Body>

<UpdateUserServiceResponse xmlns="<http://tempuri.org/>"/>

</soap:Body>

</soap:Envelope>