Veeam Backup & Replication

- SSPI authentication failed for user
- Application-Aware Processing
- Lizenznutzungsbericht
- Version 12

SSPI authentication failed for user

Challenge

When the Veeam Backup & Replication Configuration Database is using PostgreSQL, direct interaction with the database may fail with the error:

```
SSPI authentication failed for user
```

Interactions where this may occur include:

- Installing an update to Veeam Backup & Replication.

  Related: KB4543:"Failed to connect to the database." Updater Configuration Check
- Performing a configuration restore.
- Attempting to interact directly with the database (e.g., using pgAdmin or pgsql commands).

Cause

This error occurs when the account being used to perform the interaction is not authorized to access the Veeam Backup & Replication configuration database within the PostgreSQL instance.

When PostgreSQL is deployed by the Veeam Backup & Replication installer, that PostgreSQL database engine is configured to use SSPI Authentication, which allows for access authentication using Windows accounts. The pg_ident.conf file, which maps Windows accounts to the postgres root user account, is updated to add Windows accounts that should have access to the configuration database.

By default, the following Windows accounts are added as authorized to access the database directly:

- The Windows account that was used during the initial install.

- The NT AUTHORITY\SYSTEM account, which is the default account used by the Veeam Backup & Replication services.

Hostname Change Impact
If Veeam Backup & Replication was deployed using a local administrator account, and the hostname was changed after the software was installed, the entry for that local account within the pg_ident.conf file will be invalid.

Solution

Option 1: Use an Existing Authorized Windows Account

Identify which accounts are currently authorized to access the Veeam Backup & Replication configuration database, and perform the action as that user.

1. Open the following file in a text editor:
   ```
   C:\Program Files\PostgreSQL\15\data\pg_ident.conf
   ```
2. At the bottom of the file, you will find at least two uncommented lines with a format similar to this example*:
   ```
   veeam   User@Domain   postgres
   ```
   **If the PostgreSQL instance was created by the Veeam Backup & Replication installer. If the PGSQL Instance was user-created, the mapname and pg-username may be different.*
3. Use the non-SYSTEM account to perform the action that initially failed with the SSPI error.

```
# Put your actual configuration here
# ----------------------------------
# MAPNAME       SYSTEM-USERNAME         PG-USERNAME
veeam   Backupsvc@DOMAIN   postgres
veeam   "SYSTEM@NT AUTHORITY"   postgres
```

Example pg_ident.conf File

Option 2: Add a Windows Account to The Authorized Users Lists

Security Considerations

For day-to-day tasks involving Veeam Backup & Replication, a user does **not** need direct access to the Configuration Database. Therefore, from a security standpoint, it may be best to only add accounts to the pg_ident.conf file when absolutely necessary. (Consider assigning a single account as the account that will be used for performing Veeam Backup & Replication updates or Configuration Restores.)

Identify Which Account Was in Use When the SSPI Error Occurred

These steps assume the SSPI error has recently occurred and is still in the latest log folder.

1. Navigate to the PostgreSQL log folder.
   The default PostgreSQL 15 path: **C:\Program Files\PostgreSQL\15\data\log**
2. Sort the folder contents by last modified, and open the latest log file.
3. Scroll to the end of the log file and begin scrolling up. Look for entries like this:

   ```
   LOG:  no match in usermap "veeam" for user "postgres" authenticated as "pgadmin@VBR12"
   FATAL:  SSPI authentication failed for user "postgres"
   ```

4. Take note of the account indicated in the error.
   (In the example above, the account *pgadmin@VBR12* is listed at the very end of line 1.)

Add Windows Account to pg_ident.conf

5. Open the mappings file in a text editor:

   ```
   C:\Program Files\PostgreSQL\15\data\pg_ident.conf
   ```

6. Add a new line at the bottom of the file in the following format:
   Replacing pgadmin@VBR12 with the account you identified in your logs on Step 4.

   ```
   veeam   pgadmin@VBR12   postgres
   ```

   https://www.veeam.com/kb4542

Application-Aware Processing

By default, Veeam Backup & Replication does not process application logs and creates a crash-consistent backup of VMs with applications that use transaction logs for operations. You can create a transactionally consistent backup — in this case, Veeam Backup & Replication will process application logs. In case a disaster strikes, Veeam Backup & Replication will use backups of logs to perform recovery operations.

To create transactionally consistent backups or replicas of VMs that run the following applications, you must enable application-aware processing in job settings:

- Microsoft Active Directory
- Microsoft SQL Server
- Microsoft SharePoint
- Microsoft Exchange
- Oracle
- PostgreSQL

Application-aware processing is the Veeam technology that allows Veeam Backup & Replication to prepare applications running on the VM and create a consistent view of application data on the VM guest OS. Once the application is ready, Veeam Backup & Replication triggers the VM snapshot and starts to copy VM data to the target. Depending on the VM OS, Veeam Backup & Replication utilizes the following technologies to create transactionally consistent backups:

- For Windows-based VMs, Veeam Backup & Replication uses Microsoft Volume Shadow Copy Service (Microsoft VSS). Microsoft VSS ensures that there are no unfinished database transactions or incomplete application files. For more information, see Microsoft Docs.
- For Linux-based VMs, Veeam Backup & Replication uses the agent that connects to the VM guest OS and prepares databases and instances for a consistent backup.

Requirements and Limitations

Application-aware processing is supported for Linux-based VMs and Microsoft Windows client versions starting from Windows Vista and for server versions starting from Windows Server 2008. To use application-aware processing, you must have VMware Tools and the latest updates installed on the VM guest OS. For more information on supported guest OS versions, see Supported Applications.

Important

If a VM runs an application that does not support Microsoft VSS (there is no VSS writer for this particular type of application, for example, MySQL), Veeam Backup & Replication will not be able to utilize Microsoft VSS and application-aware processing for this VM. To process such VMs, you can use VMware Tools quiescence with pre-freeze and post-thaw scripts. For more information, see VMware Tools Quiescence and Pre-Freeze and Post-Thaw Scripts.

How Application-Aware Processing Works for Windows-Based Machines

If you enable application-aware processing in job settings, Veeam Backup & Replication performs the following operations as a part of the backup or replication process:

1. Veeam Backup & Replication deploys the non-persistent runtime components or, if necessary, persistent agent components on the VM and detects if the VM runs any of the supported applications.
2. Veeam Backup & Replication collects information about applications installed on VMs — this information is required for VSS-aware restore.

VSS-aware restore is performed when the VM is started after you restore it from the backup or fail over to a VM replica.

1. Veeam Backup & Replication prepares applications for VSS-aware restore.
2. Microsoft VSS communicates with applications and freezes I/O activities at a specific point in time.
3. Veeam Backup & Replication acts as a VSS requestor and triggers a VM VSS snapshot.
4. Veeam Backup & Replication triggers a VMware vSphere snapshot of the VM.
5. Microsoft VSS resumes frozen I/O activities on the VM guest OS.
6. The job session proceeds as usual.
7. If you have instructed Veeam Backup & Replication to truncate transaction logs, Veeam Backup & Replication truncates transaction logs on the VM guest OS after the backup or replica is successfully created.

Application-Aware Processing

How Application-Aware Processing Works for PostgreSQL

If you enable application-aware processing in job settings, Veeam Backup & Replication performs the following operations as a part of the backup or replication process

1. Veeam Backup & Replication installs either non-persistent components or persistent agent components to the VM guest OS and detects if the VM runs any of the supported applications.

Note

By default, Veeam Backup & Replication installs non-persistent components to the VM guest OS and uninstalls them after the job completes. You can also install a Linux management agent to the VM guest OS — in this case, the agent will remain installed on the VM and Veeam Backup & Replication will use it to access the VM guest OS instead of SSH. For more information, see Persistent Agent Components.

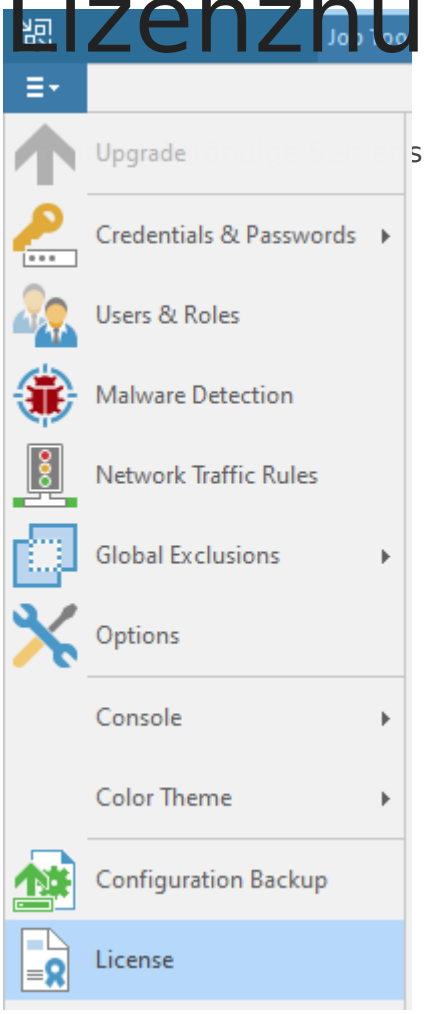
1. The pgsqlagent agent looks for PostgreSQL instance configuration files. It uses these files to get information on the PostgreSQL instance settings.

Note
By default, configuration files are located in the following directories: • [For Ubuntu, Debian] — /etc/ • [For RHEL, SLES] — /var/lib/ If you keep the configuration file in the custom directories or if you want to exclude some directories from the scan, you can manually create the /etc/veeam/VeeamPostgreSQLAgent.xml file. In this case, the pgsqlagent agent will use commands from this file. To explicitly include or exclude specific configuration files from rescan, add the following commands to the /etc/veeam/VeeamPostgreSQLAgent.xml file: • ExcludeConfigDirs — use this command to exclude configuration files. • AddConfigDirs — use this command to include configuration files. Note that you must embed the commands into the <config /> tag. To specify several directories, separate them by a comma. For example: <config ExcludeConfigDirs="/etc/postgresql/13/cl4/,/etc/postgresql/13/cl6/" AddConfigDirs="/home/user/pgconfdir/"/>. This command skips 2 directories and includes 1 custom directory.

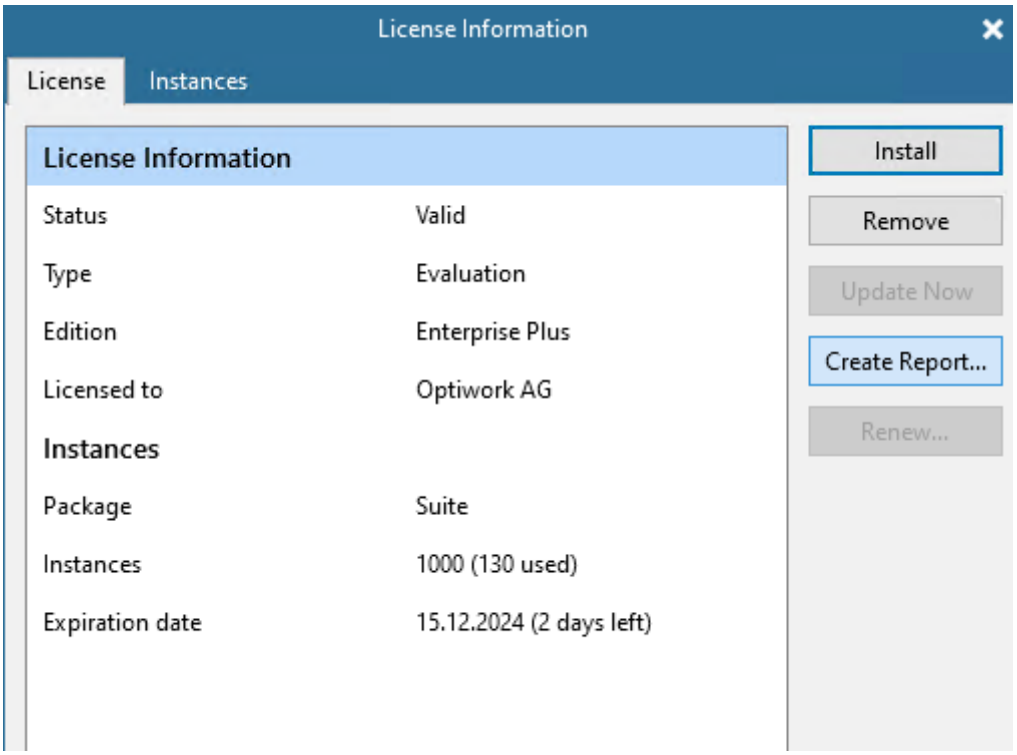
1. The pgsqlagent agent returns a list of PostgreSQL configuration files to Veeam Backup & Replication.
2. Veeam Backup & Replication accesses the PostgreSQL VM guest OS over SSH or over management agent.
3. Veeam Backup & Replication connects to the PostgreSQL instance, gets a list of databases added to the instance and information that is necessary for data recovery operations.
4. The pgsqlagent agent sets the PostgreSQL instance to the ready for a backup state.
5. Agent freezes the VM guest OS and creates a snapshot of the PostgreSQL instance.
6. Veeam Backup & Replication completes a backup of the PostgreSQL instance and resumes stopped activities on the VM guest OS.
7. Veeam Backup & Replication saves a backup of a machine with a PostgreSQL instance to a backup repository.

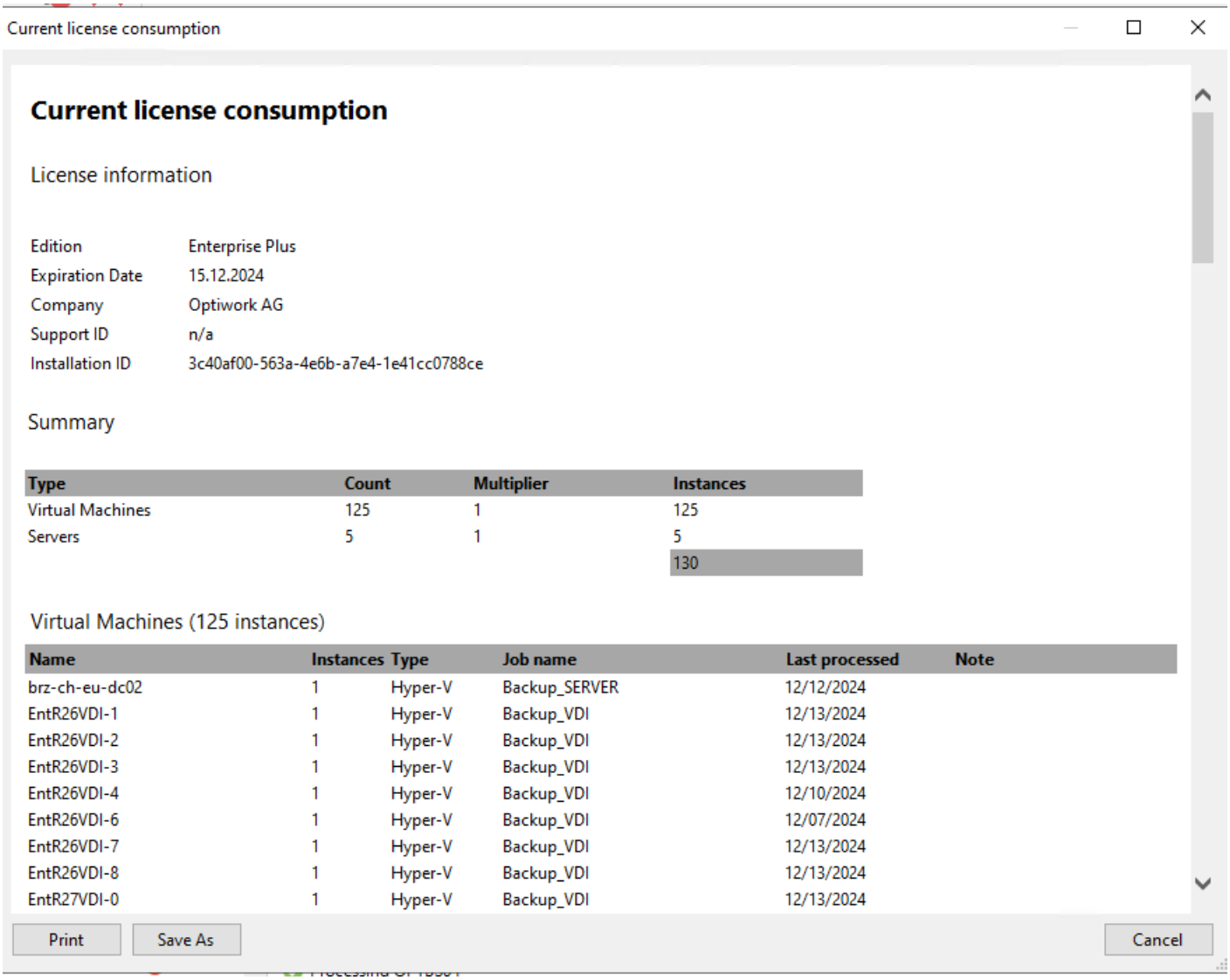
https://helpcenter.veeam.com/docs/backup/vsphere/application_aware_processing.html?ver=120

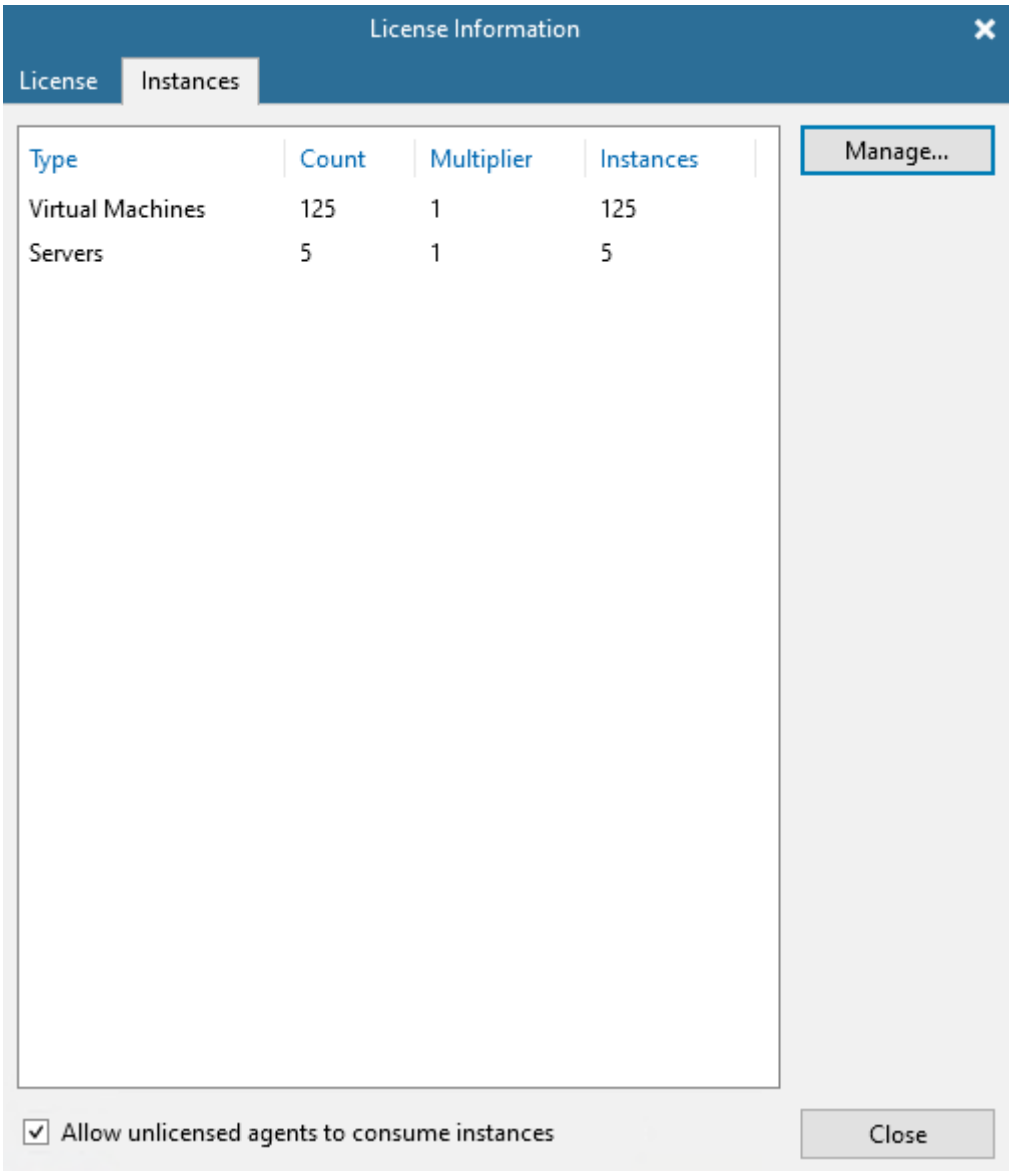
Lizenznutzungsbericht



site aller Backup Jobs zu erhalten:


License Information
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Instances
License Information
Status
Valid
Type
Evaluation
Edition
Enterprise Plus
Licensed to
Optiwork AG
Instances
Package
Suite
Instances
1000 (130 used)
Expiration date
15.12.2024 (2 days left)
Install
Remove
Update Now
Create Report...
Renew...


Current license consumption
Current license consumption
License information
Edition Enterprise Plus
Expiration Date 15.12.2024
Company Optiwork AG
Support ID n/a
Installation ID 3c40af00-563a-4e6b-a7e4-1e41cc0788ce
Summary
Type Count Multiplier Instances
Virtual Machines 125 1 125
Servers 5 1 5
130
Virtual Machines (125 instances)
Name Instances Type Job name Last processed Note
brz-ch-eu-dc02 1 Hyper-V Backup_SERVER 12/12/2024
EntR26VDI-1 1 Hyper-V Backup_VDI 12/13/2024
EntR26VDI-2 1 Hyper-V Backup_VDI 12/13/2024
EntR26VDI-3 1 Hyper-V Backup_VDI 12/13/2024
EntR26VDI-4 1 Hyper-V Backup_VDI 12/10/2024
EntR26VDI-6 1 Hyper-V Backup_VDI 12/07/2024
EntR26VDI-7 1 Hyper-V Backup_VDI 12/13/2024
EntR26VDI-8 1 Hyper-V Backup_VDI 12/13/2024
EntR27VDI-0 1 Hyper-V Backup_VDI 12/13/2024
Print
Save As
Cancel


License Information
License
Instances
Type
Count
Multiplier
Instances
Virtual Machines
125
1
125
Servers
5
1
5
Manage...
Allow unlicensed agents to consume instances
Close

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