Veritas Enterprise Vault™ Technical Note

Monitoring Enterprise Vault

11.0 and later

VERITAS™

Veritas Enterprise Vault: Monitoring Enterprise Vault

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Contents

Monitoring Enterprise Vault

This chapter includes the following topics:

■ About monitoring Enterprise Vault

About monitoring Enterprise Vault

Enterprise Vault includes a management pack for System Center Operations Manager (SCOM). The pack defines rules that enable SCOM to monitor Enterprise Vault components and critical Enterprise Vault events in the Application Event Log on Enterprise Vault servers.

This technical note details the monitoring that the SCOM pack provides so that you can implement the same monitoring with other tools.

You may also find that it is helpful to refer to the Enterprise Vault *PowerShell Cmdlets* manual. That manual describes how to perform various administrative tasks by running the Enterprise Vault PowerShell cmdlets.

Some of the Enterprise Vault PowerShell cmdlets are provided by DLL modules that are not imported automatically by the Enterprise Vault Management Shell. Before you can use these cmdlets you must import the following DLL modules:

■ Symantec.EnterpriseVault.PowerShell.Core.dll

■ Symantec.EnterpriseVault.PowerShell.Monitoring.dll

For example:

```
import-module "C:\Program Files (x86)\Enterprise Vault
        \Symantec.EnterpriseVault.PowerShell.Core.dll"
```

```
import-module "C:\Program Files (x86)\Enterprise Vault
 \Symantec.EnterpriseVault.PowerShell.Monitoring.dll"
```

Enterprise Vault locations

This chapter includes the following topics:

About monitoring locations

This section describes monitoring for various Enterprise Vault locations. Enterprise Vault automatically shuts down if there is no free space in any of these locations.

Application location used disk space

Purpose

Determine the space used and space available on the Enterprise Vault installation disk.

Suggested frequency

Every 5 minutes

Suggested thresholds

- Warning alert: 90% used

- Critical alert: 95% used

Method 1 (preferred)

Use the `Application` instance of the **Disk space % used** performance counter:

```
Enterprise Vault Disk Location\Disk space % used\Application
Monitors the volume that hosts the Application location
```

Method 2

Use the Get-EVFileLocation PowerShell cmdlet.

Sample output

```
PS C:> Get-EVFileLocation -type application

Path                  : C:\Program Files (x86)\Enterprise Vault
Type                  : Application
TotalQuotaGBytesFree  : 68.12
TotalQuotaGBytesUsed  : 31.78
TotalQuotaGBytesAvailable : 99.9
```

Example

To determine the amount of free space at the Enterprise Vault application location:

```
(Get-EVFileLocation Application).TotalQuotaGbytesFree
```

Enterprise Vault cache location used disk space

Purpose

Determine the space used and space available at the Enterprise Vault cache location.

Suggested frequency

Every 5 minutes

Suggested thresholds

- Warning alert: 90%

- Critical alert: 95%

Method 1 (preferred)

Use the `Cache` instance of the `Disk space % used` performance counter:

```
Enterprise Vault Disk Location\Disk space % used\Cache
Monitors the volume that hosts the Cache location
```

Method 2

Use the `Get-EVFileLocation` cmdlet.

Sample output

```
PS C:\> Get-EVFileLocation -type cache

Path                    : D:\MyCache
Type                    : Cache
TotalQuotaGBytesFree    : 68.12
TotalQuotaGBytesUsed    : 31.78
TotalQuotaGBytesAvailable : 99.9
```

Example

To determine the amount of free space at the Enterprise Vault cache location:

```
(Get-EVFileLocation cache).TotalQuotaGbytesFree
```

Enterprise Vault Temp location used disk space

Purpose

Determine the space used and space available at the Enterprise Vault temporary location.

Suggested frequency

Every 5 minutes

Suggested thresholds

- Warning alert: 75% used

- Critical alert: 95% used

Method 1 (preferred)

Use the `Temporary` instance of the `Disk space % used` performance counter:

```
Enterprise Vault Disk Location\Disk space % used\Temporary
Monitors the volume that hosts the Temporary location
```

Method 2

Use the `Get-EVFileLocation` cmdlet.

Sample output

```
PS C:> Get-EVFileLocation -type temporary

Path                     : C:\Users\VAULTA~1\AppData\Local\Temp
Type                     : Temporary
TotalQuotaGBytesFree     : 68.12
TotalQuotaGBytesUsed     : 31.78
TotalQuotaGBytesAvailable : 99.9
```

Example

To determine the free space at the Enterprise Vault temporary location:

```
(Get-EVFileLocation temporary).TotalQuotaGbytesFree
```

Enterprise Vault Directory database

This chapter includes the following topics:

- About monitoring the Directory database
- Directory database data file backup
- Directory database log backup
- Directory database file volume percentage used space
- Directory database log file volume percentage used space
- Directory database connectivity

About monitoring the Directory database

This section describes how to check for the most recent directory database backups and to check the amount of used space on the database volumes.

Directory database data file backup

Purpose

Determine the time since the most recent back up.

Suggested frequency

Every 4 hours

Suggested thresholds

- Warning alert: 48 hours

- Critical alert: 72 hours

Method 1 (preferred)

Use the **Hours since last backup** performance counter to determine the number of days since the last backup.

```
\Enterprise Vault Database Files\Hours since last backup
Hours since last backup of the database file
```

Method 2

Use the Get-EVDatabaseFileInfo cmdlet to determine the number of hours since the last backup:

```
Get-EVDatabaseFileInfo -databasetype directory
```

Sample output

```
Typical output:

DatabaseName            : EnterpriseVaultDirectory
LogicalFileName         : VaultDev70
PhysicalFileName        : D:\SQL Server\MSSQL.1\MSSQL\DATA\VaultDevdb.mdf
FileType                : Data
TotalQuotaGBytesUsed    :
TotalQuotaGBytesAvailable :
TotalQuotaGBytesFree    :
LastBackupDate          :
HoursSinceLastBackup    : 25
```

Note: TotalQuotaGBytesUsed, TotalQuotaGBytesAvailable, TotalQuotaGBytesFree are not available if the SQL Server version is earlier than SQL Server 2008 R2 SP1.

Example

To determine the number of hours since the last backup:

```
(Get-EVDatabaseFileInfo -databasetype directory) | where `
    $_.filetype -eq "data"}).hourssincelastbackup
25
```

Directory database log backup

Purpose

Determine the time since the most recent back up of the Directory database log file.

Suggested frequency

Every 4 hours

Suggested thresholds

- Warning alert: 12 hours

- Critical alert: 24 hours

Method 1 (preferred)

Use the **Hours Since Last Backup** performance counter:

```
\Enterprise Vault Database Files\Hours Since Last Backup
Hours since last backup of the database
```

Method 2

Use the Get-EVDatabaseFileInfo cmdlet.

```
Get-EVDatabaseFileInfo -databasetype directory
```

Example

To determine the number of hours since the last backup:

```
PS ((Get-EVDatabaseFileInfo -databasetype directory) | where `
        {$_.filetype -eq "log"}).hourssincelastbackup
25
```

Directory database file volume percentage used space

Purpose

Determine the used disk space at the Directory database location.

Suggested frequency

Every 4 hours

Suggested thresholds

- Warning alert: 75%

- Critical alert: 90%

Method

Use the **Database file location % used** performance counter:

Note: This check is available on SQL 2008 R2 SP1 and later.

```
\Enterprise Vault Database Files\Database file location % used
Space used by the file as a percentage of total space.
```

Directory database log file volume percentage used space

Purpose

Determine the used disk space at the log file location.

Suggested frequency

Every 4 hours

Suggested thresholds

- Warning alert: 90%

- Critical alert: 95%

Method

Use the **Database file location % used** performance counter:

Note: This check is available on SQL 2008 R2 SP1 and later.

```
Enterprise Vault Database Files\Database file location % used
Space used by the file as a percentage of total space.
```

Directory database connectivity

Purpose

Determine the connectivity to each Enterprise Vault database.

Suggested frequency

Every 15 minutes

Method

Use the 'Connectivity' performance counter:

```
\Enterprise Vault Databases\Connectivity
Enterprise Vault database connectivity counters
```

Vault Store Group fingerprint database

This chapter includes the following topics:

- About monitoring fingerprint databases
- Fingerprint database data file backup
- Fingerprint database log backup
- Vault Store Group Fingerprint database file volume used space
- Vault Store Fingerprint database log file location % volume used

About monitoring fingerprint databases

This section describes how to check for the most recent fingerprint database backups and to check the amount of used space on the database volumes.

Fingerprint database data file backup

Purpose

Determine the used disk space at the data file location.

Suggested frequency

Every 4 hours

Method

Use the 'Vault Store Group DB back-up' performance counter:

```
\Enterprise Vault::Vault Store Group\Vault Store Group DB back-up
Number of days since the Vault Store Group
database was backed up.
```

Fingerprint database log backup

Purpose

Determine when the fingerprint database log file was last backed up.

Suggested frequency

Every 4 hours

Method

Use the 'Vault Store Group DB log back-up' performance counter:

```
\Enterprise Vault::Vault Store Group\Vault Store Group DB log back-up
Number of days since the Vault Store Group database
transaction log was backed up.
```

Vault Store Group Fingerprint database file volume used space

Suggested frequency

Every 1 hour

Suggested thresholds

- Warning alert: 75%

- Critical alert: 90%

Method

Use the 'Vault Store Group DB log % used' performance counter.

```
\Enterprise Vault::Vault Store Group\Vault Store Group DB log % used
% space used of the Vault Store Group database transaction log.
```

Vault Store Fingerprint database log file location % volume used

Purpose

Determine the percentage of available space that has been used by a fingerprint database.

Suggested frequency

Every 1 hour

Suggested thresholds

- Warning alert: 90%

- Critical alert: 95%

Method

Use the 'Get-EVDatabaseFileInfo' cmdlet.

Sample output

```
DatabaseName             : EVVSExpressVaultStore_1
LogicalFileName          : EVVSExpressVaultStore_170
PhysicalFileName         : D:\SQL\MSSQL.1\MSSQL\DATA\EVVSExpressVaultStore_1.mdf
FileType                 : Data
TotalQuotaGBytesUsed      :
TotalQuotaGBytesAvailable :
TotalQuotaGBytesFree      :
LastBackupDate           :
HoursSinceLastBackup     : 25
```

Vault Store database

This chapter includes the following topics:

About monitoring vault store databases

This section describes how to check for the most recent vault store backups and to check the amount of used space on the database volumes.

Vault Store database data file backup

Purpose

Determine the time since the last database back up.

Suggested frequency

Every 4 hours

Suggested thresholds

- Warning alert:48 hours

- Critical alert: 72 hours

Method

Use the **Hours since last backup** performance counter:

```
\Enterprise Vault Database Files\Hours since last backup
Monitors the backup state of a Vault Store database data file
```

Vault Store database log file backup

Purpose

Determine the time since the last log file back up.

Suggested frequency

Every 4 hours

Suggested thresholds

- Warning alert: 12 hours
- Critical alert: 24 hours

Method

Use the **Hours Since Last Backup** performance counter:

```
\Enterprise Vault Database Files\Hours Since Last Backup
Monitors the backup state of the Directory database log file
```

Vault Store database % used space

Purpose

Determine the percentage of available space that has been used by a vault store database.

Suggested frequency

Every 4 hours

Suggested thresholds

- Warning alert: 75%
- Critical alert: 90%

Method

Use the 'Vault Store DB log % used' performance counter.

Note: This check is available on SQL 2008 R2 SP1 and later.

```
\Enterprise Vault::Vault Stores\Vault Store DB log % used
Vault Store DB log % used.
```

Vault Store database file volume % used space

Purpose

Determine the percentage of available space that has been used by a vault store database file.

Suggested frequency

Every 4 hours

Suggested thresholds

- Warning alert: 75%

- Critical alert: 90%

Method

Use the 'Vault Store DB log % used' performance counter:

Note: This check is available on SQL 2008 R2 SP1 and later.

```
\Enterprise Vault::Vault Stores\Vault Store DB log % used
Vault Store DB log % used.
```

Vault Store database log file volume % used space

Suggested thresholds

- Warning alert: 75%

- Critical alert: 90%

Method 1 (preferred)

Use the **Database file location % used** performance counter.

```
Enterprise Vault Database Files\Database file location % used
Monitors the volume that hosts the Vault Store database data file.
```

Method 2

Use the `Get-EVDatabaseFileInfo` cmdlet.

Sample output

```
DatabaseName              : EVVSExpressVaultStore_1
LogicalFileName           : EVVSExpressVaultStore_1LOG70
PhysicalFileName          : D:\SQL\MSSQL.1\MSSQL\DATA\\EVVSExpressVaultStore_1LOG.ldf
FileType                  : Log
TotalQuotaGBytesUsed      :
TotalQuotaGBytesAvailable :
TotalQuotaGBytesFree      :
LastBackupDate            :
HoursSinceLastBackup      : 25
```

Vault Store database connectivity

Purpose

Check the connectivity to a Vault Store database.

Suggested frequency

Every 15 minutes

Method

Use the **Connectivity** performance counter:

```
\Enterprise Vault Databases\Connectivity
Monitors the connectivity to a Vault Store database
```

Vault Store

This chapter includes the following topics:

- About monitoring vault stores
- Vault Store backup mode
- Vault Store backup state
- Vault Store SQL Server connectivity

About monitoring vault stores

This section describes how to determine the following:

- The time since the most recent vault store backups
- The amount of used space on the database volumes
- The number of vault stores in backup mode

Vault Store backup mode

Purpose

Determine how many Vault Store partitions are in backup mode.

Suggested frequency

Every 5 minutes

Method

Use the 'Vault Stores in back-up mode' performance counter:

```
\Enterprise Vault::Directory\Vault Stores in back-up mode
Number of Vault Stores in back-up mode
```

Vault Store backup state

Purpose

Check that vault store partitions have been backed up.

Suggested frequency

Every 5 minutes

Method

Use the 'Hours since last backup' performance counter:

```
\Enterprise Vault Partitions\Hours since last backup
Hours since last backup of the database file.
```

Vault Store SQL Server connectivity

Purpose

Check the connection between the SQL Server and a vault store.

Suggested frequency

Every 5 hours

Method

Use the 'Connectivity' performance counter.

```
\Enterprise Vault Databases\Connectivity
Enterprise Vault database connectivity counters
```

Vault Store partitions

This chapter includes the following topics:

- About monitoring vault store partitions

- Vault Store partition backup

- Vault Store partition connectivity

- Vault Store partition used space check

About monitoring vault store partitions

This section describes how to determine the following:

- Connectivity to the vault store partitions
  The time since the most recent vault store partition backup
  The amount of used space on the database volumes

Vault Store partition backup

Purpose

Determine the time since the most recent backup of a vault store partition.

Suggested frequency

Every 5 minutes

Method 1 (preferred)

Use the 'Hours since last backup' performance counter:

```
\Enterprise Vault Partitions\Hours since last backup
```

Method 2

Use the Get-EVVaultStorePartition PowerShell cmdlet:

```
(Get-EVVaultStorePartition).HoursSinceLastBackup
25
```

Vault Store partition connectivity

Purpose

Check connectivity to a vault store partition.

Suggested frequency

Every 4 hours

Method

Use the 'Connectivity'' performance counter:

```
\Enterprise Vault Partitions\Connectivity
Connectivity counters for Vault Store partitions.
```

Vault Store partition used space check

Purpose

Check the percentage of space that has been used by a vault store partition.

Suggested frequency

Every 5 minutes

Suggested thresholds

- Warning alert: 80%
- Critical alert: 95%

Method

Use the 'Vault store partition location % used' performance counter:

```
\Enterprise Vault Partitions\Vault store partition location % used
Space used by Vault Store partition as percentage of total space.
```

Index locations

This chapter includes the following topics:

- About monitoring index locations

- Index location backup mode

- Used space on index location volume

- Check that indexing locations are accessible

About monitoring index locations

This section describes how to check the following:

- Whether the index locations are accessible
  The backup mode of each index location
  The amount of used space on each index location volume

Index location backup mode

Suggested frequency

Every hour

Suggested thresholds

- Warning alert: 12 hours

- Critical alert: 24 hours

Method

Use the 'Get-EVIndexlocation' cmdlet.

Sample output

```
IndexRootPathEntryId    : 126E4F9B20B2D7040B0BFE181306B57941810000MYSERVER
IndexServiceEntryID     : 1AE2D9AEDF7FD214E82A63ECF2FE496D21710000MYSERVER
IndexRootPath           : D:\EVStorage\Index\index8
Status                  : Open
BackupMode              : Off
ComputerName            : myserver.example.local
IndexingGroup           :
TotalQuotaGBytesFree    : 5.59
TotalQuotaGBytesUsed    : 34.41
TotalQuotaGBytesAvailable : 40
```

Used space on index location volume

Purpose

Determine the amount of used space on each index location volume.

Suggested frequency

Every 5 minutes

Suggested thresholds

- Warning alert: 80%

- Critical alert: 95%

Method

Use the 'Index location % used' performance counter:

```
\Enterprise Vault Indexing\Index location % used
Used space at the index location.
```

Check that indexing locations are accessible

Suggested frequency

Every 5 minutes

Method

Use the 'Index location connectivity state' performance counter:

```
\Enterprise Vault Indexing\Index location connectivity state
Connectivity to the index location.
```

IIS Service

This chapter includes the following topics:

- About monitoring IIS

- Web site connectivity: Enterprise Vault

- Web site connectivity: Enterprise Vault API

- Web site connectivity: Enterprise Vault indexing

- Web site connectivity: Enterprise Vault search clients

- Web site connectivity: Enterprise Vault search server

- Web site connectivity: FSA Reporting

- Web site connectivity: Enterprise Vault Monitoring

About monitoring IIS

This section enables you to check the connectivity to the Enterprise Vault web sites.

Web site connectivity: Enterprise Vault

Purpose

Check that web site is available to Enterprise Vault.

Suggested frequency

Every 4 hours

Method

Use the 'Connectivity' performance counter.

```
\Enterprise Vault Websites\Connectivity
State for the EVWebsites Connectivity.
```

Web site connectivity: Enterprise Vault API

Purpose

Check that web site is available to the Enterprise Vault API

Suggested frequency

Every 5 minutes

Method

Web site connectivity: Enterprise Vault indexing

Purpose

Check that web site is available to Enterprise Vault indexing

Suggested frequency

Every 5 minutes

Method

Use the 'Connectivity' performance counter.

```
\Enterprise Vault Websites\Connectivity
State for the EVWebsites Connectivity.
```

Web site connectivity: Enterprise Vault search clients

Purpose

Check that web site is available to Enterprise Vault search clients.

Suggested frequency

Every 5 minutes

Method

Use the 'Connectivity' performance counter.

```
\Enterprise Vault Websites\Connectivity
State for the EVWebsites Connectivity.
```

Web site connectivity: Enterprise Vault search server

Purpose

Check connectivity between the web site and the Enterprise Vault search server

Suggested frequency

Every 5 minutes hours

Method

Use the 'Connectivity' performance counter.

```
\Enterprise Vault Websites\Connectivity
State for the EVWebsites Connectivity.
```

Web site connectivity: FSA Reporting

Purpose

Check that the web site is available to FSA Reporting.

Suggested frequency

Every 5 minutes

Method

Use the 'Connectivity' performance counter.

```
\Enterprise Vault Websites\Connectivity
State for the EVWebsites Connectivity.
```

Web site connectivity: Enterprise Vault Monitoring

Purpose

Check that the web site is available to Enterprise Vault Monitoring

Suggested frequency

Every 5 minutes

Method

Use the 'Connectivity' performance counter.

```
\Enterprise Vault Websites\Connectivity
State for the EVWebsites Connectivity.
```

Enterprise Vault services

This chapter includes the following topics:

- About monitoring services

- Directory service

- Indexing service

- Shopping service

- SMTP service

- Storage service

- Task Controller service

- Admin service

- Message Queuing service

- World Wide Web Publishing Service

About monitoring services

This section describes how to check the state of each Enterprise Vault service.

You can use the `Get-EVService` cmdlet to get a list of the services that are configured on an Enterprise Vault server. For example:

```
PS C:\> Get-EVService | Format-List


Name        : Enterprise Vault Directory Service
DisplayName : Enterprise Vault Directory Service
EntryID     :
```

```
Type        : DirectoryService


Name        : EnterpriseVaultAdminService
DisplayName : Enterprise Vault Admin Service
EntryID     :
Type        : AdminService


Name        : EnterpriseVaultSMTPService
DisplayName : Enterprise Vault SMTP Service
EntryID     :
Type        : SMTPService


Name        : EnterpriseVaultIndexingService
DisplayName : Enterprise Vault Indexing Service
EntryID     : 1378CA2286087EF4182F49569C3D9F80A1710000evserver1
Type        : IndexingService


Name        : EnterpriseVaultShoppingService
DisplayName : Enterprise Vault Shopping Service
EntryID     : 16205CAC637FE6943BD091320B6385E371c10000evserver1
Type        : ShoppingService


Name        : EnterpriseVaultTaskControllerService
DisplayName : Enterprise Vault Task Controller Service
EntryID     : 16781741032B3B641BA75034C5C1BD48A1011v00evserver1
Type        : TaskControllerService


Name        : EnterpriseVaultStorageService
DisplayName : Enterprise Vault Storage Service
EntryID     : 1CA3B5B05FAEBF04597FB6C4CC1F43B941e10000evserver1
Type        : StorageService
```

You can use the `Get-EVDependencyService` cmdlet to get a list of the dependency services that are configured on an Enterprise Vault server. For example:

```
PS C:\> Get-EVDependencyService | Format-List


Name        : MSMQ
DisplayName : Message Queuing
EntryID     :
Type        : MSMQService


Name        : W3SVC
```

```
DisplayName : World Wide Web Publishing Service
EntryID    :
Type       : IISService
```

Directory service

Purpose

Monitor the state of the Directory service.

Suggested frequency

Every 5 minutes

Method 1

Use the 'Get-EVServiceState' PowerShell cmdlet with the "Name" property of the service as a parameter.

Sample output

```
PS C:\> Get-EVServiceState "Enterprise Vault Directory Service"
Running
```

Method 2

Use the 'Get-Service' PowerShell cmdlet.

Sample output

```
PS C:\> Get-Service "Enterprise Vault Directory Service"


Status    Name              DisplayName
------    ----              -----------
Running   Enterprise Vaul... Enterprise Vault Directory Service
```

Indexing service

Monitor the state of an Indexing service.

Suggested frequency

Every 5 minutes

Method 1

Use the 'Get-EVServiceState' PowerShell cmdlet with the "Name" property of the service as a parameter.

Sample output

```
PS C:\> Get-EVServiceState EnterpriseVaultIndexingService
Running
```

Method 2

Use the 'Get-Service' PowerShell cmdlet.

Sample output

```
PS C:\> Get-Service IndexingService


Status    Name               DisplayName
------    ----               -----------
Running   EnterpriseVault... Enterprise Vault Indexing Service
```

Shopping service

Monitor the state of the Shopping service.

Suggested frequency

Every 5 minutes

Method 1

Use the 'Get-EVServiceState' PowerShell cmdlet with the "Name" property of the service as a parameter.

Sample output

```
PS C:\> Get-EVServiceState EnterpriseVaultShoppingService
Running
```

Method 2

Use the 'Get-Service' PowerShell cmdlet.

Sample output

```
PS C:\> Get-Service ShoppingService


Status    Name              DisplayName
------    ----              -----------
Running   EnterpriseVault... Enterprise Vault Shopping Service
```

SMTP service

Monitor the state of the SMTP service.

Suggested frequency

Every 5 minutes

Method 1

Use the 'Get-EVServiceState' PowerShell cmdlet with the "Name" property of the service as a parameter.

Sample output

```
PS C:\> Get-EVServiceState EnterpriseVaultSMTPService
Running
```

Method 2

Use the 'Get-Service' PowerShell cmdlet.

Sample output

```
PS C:\> Get-Service SMTPService


Status    Name              DisplayName
------    ----              -----------
Running   EnterpriseVault... Enterprise Vault SMTP Service
```

Storage service

Monitor the state of the Storage service.

Suggested frequency

Every 5 minutes

Method 1

Use the 'Get-EVServiceState' PowerShell cmdlet with the "Name" property of the service as a parameter.

Sample output

```
PS C:\> Get-EVServiceState EnterpriseVaultStorageService
Running
```

Method 2

Use the 'Get-Service' PowerShell cmdlet.

Sample output

```
PS C:\> Get-Service EnterpriseVaultStorageService


Status    Name              DisplayName
------    ----              -----------
Running   EnterpriseVault... Enterprise Vault Storage Service
```

Task Controller service

Monitor the state of the Task Controller service.

Suggested frequency

Every 5 minutes

Method 1

Use the 'Get-EVServiceState' PowerShell cmdlet with the "Name" property of the service as a parameter.

Sample output

```
PS C:\> Get-EVServiceState EnterpriseVaultTaskControllerService
Running
```

Method 2

Use the 'Get-Service' PowerShell cmdlet.

Sample output

```
PS C:\> Get-Service EnterpriseVaultTaskControllerService


Status    Name               DisplayName
------    ----               -----------
Running   EnterpriseVault... Enterprise Vault Task Controller Se...
```

Admin service

Monitor the state of the Admin service.

Suggested frequency

Every 5 minutes

Method 1

Use the 'Get-EVServiceState' PowerShell cmdlet with the "Name" property of the service as a parameter.

Sample output

```
PS C:\> Get-EVServiceState "EnterpriseVaultAdminService"
Running
```

Method 2

Use the 'Get-Service' PowerShell cmdlet.

Sample output

```
PS C:\> Get-Service EnterpriseVaultAdminService


Status    Name               DisplayName
------    ----               -----------
Running   EnterpriseVault... Enterprise Vault Admin Service
```

Message Queuing service

Monitor the state of the Message Queuing service.

Suggested frequency

Every 5 minutes

Method 1

Use the 'Get-EVDependencyServiceState' PowerShell cmdlet with the "Name" property of the service as a parameter.

Sample output

```
PS C:\> Get-EVDependencyServiceState "MSMQ"
Running
```

Method 2

Use the 'Get-Service' PowerShell cmdlet:

```
PS C:\> Get-Service "Message Queuing"


Status   Name            DisplayName
------   ----            -----------
Running  MSMQ            Message Queuing
```

World Wide Web Publishing Service

Suggested frequency

Every 5 minutes

Method 1

Use the 'Get-EVDependencyServiceState' PowerShell cmdlet with the "Name" property of the service as a parameter.

Sample output

```
PS C:\> Get-EVDependencyServiceState W3SVC
Running
```

Method 2

Use the 'Get-Service' PowerShell cmdlet:

Sample output

```
PS C:\> Get-Service W3SVC

Status    Name              DisplayName
------    ----              -----------
Running   W3SVC             World Wide Web Publishing Service
```

Monitoring Enterprise Vault tasks

This chapter includes the following topics:

- About monitoring tasks
- Monitoring tasks

About monitoring tasks

This section describes how to check the state of each Enterprise Vault task.

Monitoring tasks

Check that each of the Enterprise Vault tasks is in the correct state.

Suggested frequency

Every 5 minutes

Method

Use the Get-EVTask and Get-EVTaskState PowerShell cmdlets:

```
Get-EVTask | foreach{$_.EntryID;Get-EVTaskState $_.EntryID}
```

See the Enterprise Vault *PowerShell cmdlets* manual.

Sample output

```
PS C:> Get-EVTask | foreach{$_.EntryID;Get-EVTaskState $_.EntryID}
17E6DBBC4AD1EFA419D7CCD57790271DD1012100myevserver5.example.com
Running
```

```
17E46B9F34F173446B9C9554CA024DECA1013q00myevserver1
Running
12FCCD0964A565E4BBA4DC9CE3392058A1011z00myevserver1
Failed
1861053573EC32B40BAF8762078D12A091012u00myevserver1
Running
14B2DE61EBCE78543A4B0055D337FFBF71013a00myevserver1
Running
11BA649E8F1F19047A3491F6DA59663301012300myevserver1
Running
1F0AE00284DDA9F419591D199D75FE14F1012200myevserver1
Running
1B07EBFEE144D3D44B9D6848EEFC2A8D31012400myevserver1
Running
166E5F4A41B69524E868B5DD78EF08E031013100myevserver1
Running
```

Monitoring Enterprise Vault event logs

This chapter includes the following topics:

- About monitoring event logs
- Monitoring event logs

About monitoring event logs

This sections lists critical Enterprise Vault events. These events are entered into the event log and are also shown in the System Status section of the Enterprise Vault Administration Console.

Monitoring event logs

This section lists Enterprise Vault critical events. Many of these events require the administrator to take some action. Some of the events are informational, such as those that indicate that a service has started.

The value in the **Version** column denotes the Enterprise Vault version that the event log was added in.

Table 12-1

Event	Title	Added
2209	Failed to initialize the MAPI sub-system.	-
2210	Failed to initialize the COM sub-system.	-
2214	Agent message dispenser failed to start.	-

Table 12-1 *(continued)*

Event	Title	Added
2246	An error occurred opening the Journal mailbox *mailbox*. The Journal Task will shut down.	-
2247	An error occurred whilst processing the Journal mailbox *mailbox*, this mailbox is disabled or suspended from archiving, the Journal Task will shut down.	-
2249	Could not create the "*queueName*" Queue, call returned *errorText*.	-
2250	Could not Open the "*queueName*" Queue for reading, call returned *errorText*.	-
2251	Could not Open the "*queueName*" Queue for writing, call returned *errorText*.	-
2252	Could not Locate the "*queueName*" Queue, call returned *errorText*.	-
2256	The Archiving Task '*taskName*' could not be started due to startup errors.	-
2257	The Retrieval Task '*taskName*' could not be started due to startup errors.	-
2258	The Journal Task '*taskName*' could not be started due to startup errors.	-
2259	Could not open mailbox *mailboxName*, mailbox will not be processed.	-
2262	Error processing archiving request for system *name*.	-
2276	The dispenser will shut down due to an unrecoverable error.	-
2304	Failed to lookup Message Queue name for the *agentName* Agent in the Directory Service on computer *computerName*.	-
2737	The TaskController failed launch the AgentClientBroker.Exe with the following error *errorText*, the service will shut down.	-
2748	The Task failed to start as a null Site Account Domain Name was specified.	-
2749	The Task failed to start as a null Site Account name was specified.	-
2750	The Task failed to start as a null Exchange Server name was specified.	-
2751	The Task failed to start as a null Exchange Mailbox name was specified.	-
2753	The Task failed to start as a null default filter was specified.	-
2754	Task '*taskName*' failed to start because there is no default Retention Category.	-
2757	The service failed to start as a null schedule was specified.	-
2823	The Journal mailbox, *mailboxName*, has exceeded its storage quota limits. The Journal Task will shut down. Please remove all storage quota limits from this mailbox.	-
2851	There is not enough free disk space to continue.	-

Table 12-1   *(continued)*

Event	Title	Added
2853	There are not enough resources available to continue.	-
2854	An unrecoverable error occurred. There is a problem with one of the disks.	-
2949	The Public Folder Task '*taskName*' could not be started due to startup errors.	-
3027	Error reading the legacy message store and mailbox distinguished names from active directory for mailbox *mailboxName*.	-
3038	Unable to determine the version of the Exchange server *serverName*, the Task will shut down.	-
3039	Could not get a MAPI session from the session pool whilst retrieving an item to a mailbox.	-
3040	CMailboxHelper::CreateSession() has failed to create a pointer to a MAPI Session.	-
3041	CMailboxHelper::CreateSession() has been passed invalid parameters.	-
3077	Unable to determine the version of the Exchange server *serverName*, the Task will shut down.	-
3078	Unable to determine the version of the Exchange server *serverName*, the Task will shut down.	-
3079	Unable to determine the version of the Exchange server *serverName*, the Task will shut down.	-
3080	The version of the Exchange server *serverName* is not compatible, the Task will shut down.	-
3087	An error occurred during Task Initialization, the Task has shut down.	-
3144	The agent will now shut down as it cannot reliably continue.	-
3150	This Task will now shut down.	-
3229	A Journal mailbox has a backlog of messages held in its Inbox.	-
3231	Could not get a MAPI session from the session pool.	-
3284	A recoverable error was detected, the dispenser has been asked to sleep.	-
3289	Task Controller Service started (*version*).	-
3290	Task Controller Service stopped.	-
3294	The Public Folder Task '*taskName*' against *taskTarget* has stopped.	-
3295	The Journal Task '*taskName*' against *taskTarget* has stopped.	-
3296	The Archiving Task '*taskName*' against *taskTarget* has stopped. This is a normal shut down, no action is required.	-
3297	The Archiving Task '*taskName*' against *exchangeServer* has started (*versionNumber*).	-

Table 12-1 *(continued)*

Event	Title	Added
3298	The Journal Task '*taskName*' against *exchangeServer* has started (*versionNumber*).	-
3299	The Public Folder Task '*taskName*' against *exchangeServer* has started (*versionNumber*).	-
3300	The Task '*taskName*' failed to start due to incorrect user permissions.	-
3301	The Task '*taskName*' failed to start, probably due to incorrect user permissions.	-
3305	The Task '*taskName*' failed to log on to Exchange server '*exchangeServer*' using mailbox '*mailboxName*'.	-
3311	SMTP Mail Archiving has started successfully.	-
3312	SMTP Mail Archiving encountered a serious error during initialization and is unable to operate correctly.	-
3313	SMTP Mail Archiving encountered a serious error resulting in the loss of a message.	-
3314	SMTP Mail Archiving failed to save a captured message because the disk is full. Retry will occur every *number* seconds until the message is saved. This may result in a backlog of messages in the SMTP queue.	-
3320	// SMTP Mail Archiving failed to load because a valid license key is not installed. Incoming messages will not be captured and will be delivered to the SMTP drop directory or relayed to another server.	-
3329	The task controller cannot start the following MAPI-dependent tasks because the required version of MAPI is missing or incorrectly configured on Enterprise Vault server.	-
3360	The Exchange Server *name* is running Exchange Server version 5.5. This version of Exchange Server is not supported by Enterprise Vault. The task will shut down.	-
3391	Could not open mailbox. Shortcut processing aborted.	-
3410	The task failed to log on to the Exchange Server. The task is running as a Windows user that is a member of the 'domain admins' group. Remove the user from this group to ensure that the task has sufficient access to the Exchange Server.	-
3414	An Enterprise Vault task is not correctly configured.	-
3415	An Enterprise Vault task is not correctly configured.	-
3416	An Enterprise Vault task is not correctly configured.	-
3418	An unsupported Microsoft Outlook version has been detected.	-
3422	An Enterprise Vault task is not correctly configured.	-

Table 12-1   *(continued)*

Event	Title	Added
3460	The Task '*taskName*' failed to log on to Exchange server '*exchangeServer*' using mailbox '*mailboxName*'.	-
3460	The Task '*taskName*' failed to log on to Exchange server '*exchangeServer*' using mailbox '*mailboxName*'.	-
3465	An unsupported Microsoft Outlook version has been detected.	-
3466	The Exchange Public Folder Task is targeting an Exchange 2013 server but no public folder mailboxes have been created in the organization.	-
3467	No mailboxes on the Exchange Server will be archived. The request will be retried on the next run of the archiving task.	-
3471	Cannot determine the version of Microsoft Outlook that is installed on the Enterprise Vault server because Windows Management Instrumentation Service is not running.	-
3481	Could not determine which version of Outlook is installed. This error may be caused by a Windows Management Instrumentation (WMI) problem.	-
3488	The version of Outlook is not supported when archiving from the selected Exchange Server. You must upgrade to a supported Outlook version before you can archive from this Exchange Server.	12.0
3489	The current Exchange server version is not a supported archiving target.	12.0
4110	The Admin Service has successfully completed its preliminary checks and has started (*versionNumber*).	-
4111	The Admin Service has stopped.	-
4140	Insufficient Virtual Memory is available for Enterprise Vault to run.	-
4141	Insufficient diskspace is available on drive *drive* for Enterprise Vault to run.	-
4142	Insufficient diskspace is available for Enterprise Vault to run.	-
4143	Insufficient Diskspace is available on drives *drive* and *drive* for Enterprise Vault to run.	-
4144	The system is running out of Virtual Memory - free memory by closing any unwanted applications.	-
4145	The system is running out of diskspace on drive *drive* - delete any unwanted files.	-
4146	The system is running out of diskspace - delete any unwanted files.	-
4147	The system is running out of diskspace on drives *drive* and *drive* - delete any unwanted files.	-
4166	An unhandled access violation has occurred.	-

Table 12-1   *(continued)*

Event	Title	Added
4183	There have been more than *number* Errors in the last *number* seconds, of which *number* or more are from Enterprise Vault.	-
4197	The system is running out of diskspace on drive *drive* - delete any unwanted files.	-
4198	The system is running out of diskspace - delete any unwanted files.	-
4199	The system is running out of diskspace on drives *drive* and *drive* - delete any unwanted files.	-
4207	The Enterprise Vault services cannot start because an error has occurred writing a required setting to the registry.	-
4212	Enterprise Vault is configured in a cluster. You must use the cluster software to bring the service online.	-
4214	License checking has identified that you currently do not have any licensed features.	-
4217	Required license not installed. An Enterprise Vault license is required for the following feature but the license is not installed.	-
4218	Required license not active. An Enterprise Vault license is required for the following feature but the installed license is not currently active.	-
4219	Failed to install license file.	-
4221	Failed to look up the anonymous user account.	-
4222	The anonymous user account is not valid	-
4223	Authentication is currently being delayed due to a suspected brute-force attack.	-
4226	// An unsupported version of Microsoft Outlook is installed on this server. All services and tasks will continue to run but you may experience issues during archiving and retrieving of Exchange Server items.	-
4254	Summary Event Log entries have been suppressed recently.	-
4255	Summary Event Log entries have been suppressed recently.	-
4257	The Event Filter is active and its configuration has been updated.	-
4258	The Event Filter has been deactivated and will no longer filter Enterprise Vault events from the Event Logs.	-
4259	The Event Filter has been deactivated and will no longer filter Enterprise Vault events from the Event Logs.	-
4266	The simple thread is running *number* seconds after the exit request.	-

Table 12-1   *(continued)*

Event	Title	Added
4273	Process failed.	-
4275	An Enterprise Vault license is required for the IMAP Server to be fully operational.	-
4293	Enterprise Vault SMTP Service registration error.	12.2
4294	Clustered Enterprise Vault SMTP Service not online.	12.2
4296	Enterprise Vault SMTP service not installed on cluster node.	12.2
4297	Enterprise Vault SMTP service detection failed on cluster node.	12.2
4298	Enterprise Vault SMTP cluster configuration error.	12.2
5186	The Shopping Service has started (*versionNumber*).	-
5187	The Shopping Service cannot perform the requested MAPI dependent operation because the required version of MAPI is missing or incorrectly configured on the Enterprise Vault server.	-
5230	The Shopping Service cannot perform the requested MAPI dependent operation because the required version of	-
6221	Storage Service started (*versionNumber*).	-
6222	Storage Service stopped.	-
6517	Error restarting Storage Management.	-
6655	Process failed.	-
6681	Process stopped.	-
6977	The MigratorServer cannot start because the required version of MAPI is missing or incorrectly configured on the Enterprise Vault server.	-
7014	The NSF MigratorServer is unable to initialize the Notes runtime system.	-
7046	Unable to set Vault Store Backup Mode.	-
7058	Successfully set Backup Mode on Vault Store.	-
7059	Successfully set Backup Mode on all the Vault Stores in the Vault Store Group that are managed by the Storage Service on this computer.	-
7060	Successfully set Backup Mode on all the Vault Stores that are managed by the Storage Service on this computer.	-

Table 12-1 *(continued)*

Event	Title	Added
7077	Legacy registry values are in use. Enterprise Vault has a new method of backing up Vault Stores that cannot be used until you remove this registry value.	-
7079	Successfully cleared Backup Mode from Vault Store.	-
7080	Successfully cleared Backup Mode from all the Vault Stores in the Vault Store Group that are managed by the Storage Service on this computer.	-
7081	Successfully cleared Backup Mode from all the Vault Stores that are managed by the Storage Service on this computer.	-
7082	Unable to clear Vault Store Backup Mode.	-
7098	A locking error has occurred.	-
7162	You are recommended to create a new SQL index for this vault store database to improve the performance of processing items in the Centera collection area.	-
7168	The Indexing Service has started (*versionNumber*).	-
7169	The Indexing Service has stopped.	-
7184	Could not invoke Index Server.	-
7206	A locking error has occurred in *lock* : *number* .	-
7207	Could not initialize lock: *lock*.	-
7243	The index data could not be committed to disk.	-
7252	The AltaVista Index is full. No more data can be stored in this index.	-
7292	The index volume has been marked as failed.	-
8192	The Directory Service has started (*versionNumber*).	-
8193	The Directory Service has stopped.	-
13397	The connection '*connectionName*' was lost and the system is waiting to reconnect (Thread Id: *threadName*).	-
13397	The connection '*connectionName*' was lost and the system is waiting to reconnect (Thread Id: *thread*).	-
16385	The SPS Archive service for *sharepointServer* has started (*versionNumber*).	-
16386	The SPS Archive service for *taskTarget* has stopped.	-

Table 12-1 *(continued)*

Event	Title	Added
16397	An unrecoverable error has occurred, the service will be shut down.	-
16426	The SPS Pruning Service has started.	-
16427	The SPS Pruning Service has stopped.	-
16432	The SPS service cannot start because the required version of MAPI is missing or incorrectly configured on the Enterprise Vault server.	-
20481	The Enterprise Vault File Placeholder service has started (*versionNumber*).	-
20482	The Enterprise Vault File Placeholder service has stopped.	-
20484	The Enterprise Vault File Placeholder Service failed to start because the Enterprise Vault file system filter driver is not installed.	-
20497	Error in the automatic proxy configuration script.	-
20501	The server is requesting client authentication.	-
20503	The connection with the server has been terminated.	-
20504	The connection with the server has been reset.	-
20540	The wrong version (*installedVersion*) of evmf.sys is installed. Version *requiredVersion* is required.	-
29000	Item has not been added to the storage queue because the queue has reached its maximum length.	-
29002	The storage queue is closed.	-
29005	The storage queue location '*location*' is not accessible.	-
29013	Item has not been added to the storage queue because the remaining disk space of the queue has breached its.	-
29017	The last collection identity generated on disk for this vault store is higher than the highest collection.	-
29058	Failed to process an item from the Storage Queue. The item has been moved into the Storage Queue's failed.	-
29059	Could not process an item from the Storage Queue because the queue file does not exist.	-
40966	*Various*.	-
40968	*Various*.	-
40972	*Various*.	-

Table 12-1   *(continued)*

Event	Title	Added
40975	*Various*.	-
40976	*Various*.	-
40977	*Various*.	-
40978	*Various*.	-
40979	*Various*.	-
40980	*Various*.	-
40982	*Various*.	-
40997	*Various*.	-
41008	*Various*.	-
41011	*Various*.	-
41012	*Various*.	-
41013	*Various*.	-
41014	*Various*.	-
41015	*Various*.	-
41016	*Various*.	-
41020	*Various*.	-
41021	*Various*.	-
41022	*Various*.	-
41023	*Various*.	-
41024	*Various*.	-
41035	*Various*.	-
41036	*Various*.	-
41037	*Various*.	-
41042	*Various*.	-
41045	*Various*.	-

Table 12-1 *(continued)*

Event	Title	Added
41046	*Various*.	-
41047	*Various*.	-
41049	*Various*.	-
41050	*Various*.	-
41051	*Various*.	-
41052	*Various*.	-
41053	*Various*.	-
41054	*Various*.	-
41059	*Various*.	-
41060	*Various*.	-
41061	*Various*.	-
41062	*Various*.	-
41066	*Various*.	-
41067	*Various*.	-
41069	*Various*.	-
41082	*Various*.	-
41110	*Various*.	-
41129	*Various*.	-
41133	*Various*.	-
41203	*Various*.	-
41204	*Various*.	-
41205	*Various*.	-
41206	*Various*.	-
41207	*Various*.	-
41257	*Various*.	-

Table 12-1   *(continued)*

Event	Title	Added
41258	*Various.*	-
41259	*Various.*	-
41260	*Various.*	-
41261	*Various.*	-
41262	*Various.*	-
41263	*Various.*	-
41264	*Various.*	-
41265	*Various.*	-
41266	*Various.*	-
41267	*Various.*	-
41268	*Various.*	-
41282	*Various.*	-
41285	*Various.*	-
41286	*Various.*	-
41287	*Various.*	-
41289	*Various.*	-
41290	*Various.*	-
41291	*Various.*	-
41292	*Various.*	-
41293	*Various.*	-
41306	*Various.*	-
41308	*Various.*	-
41317	*Various.*	-
41318	*Various.*	-
41319	*Various.*	-

Table 12-1 *(continued)*

Event	Title	Added
41321	*Various*.	-
41329	*Various*.	-
41338	*Various*.	-
41344	*Various*.	-
41366	*Various*.	-
41367	*Various*.	-
41443	*Various*.	-
41444	*Various*.	-
41445	*Various*.	-
41446	*Various*.	-
41447	*Various*.	-
41448	*Various*.	-
41449	*Various*.	-
41468	*Various*.	-
41470	*Various*.	-
41488	*Various*.	-
41490	*Various*.	-
41492	*Various*.	-
41541	SMTP Archiving task *taskname* could not load targets or targets are not yet added.	12.2
41558	*Various*.	-
41559	*Various*.	-
41560	*Various*.	-
41561	Fragmentation warning for indexes of '*database*' on SQL server instance '*instanceName*'.	-
41567	The Enterprise Vault SMTP service configuration is changed to listen to another port.	12.0

Table 12-1 *(continued)*

Event	Title	Added
41569	The Enterprise Vault SMTP holding folder location is changed. Email messages stored in the previous SMTP holding folder will not be processed.	12.0
41573	*Various.*	-
41576	The Enterprise Vault SMTP holding folder is removed and will no longer receive email messages.	12.0
41577	*Various.*	-
41578	*Various.*	-
41581	The Compliance Sampling process cannot access the Compliance Accelerator customer database.	12.0
41582	The Compliance Sampling process is unable to read the latest configuration changes made to the Compliance Accelerator customer database. Any customer configuration changes, such as department memberships, made since the last refresh are not applied to Compliance Accelerator sampling until the customer configuration is successfully refreshed again.	12.0
41583	*Various.*	-
41584	*Various.*	-
41585	The IMAP server was unable to connect to the storage server.	12.0
41606	The SQL command has executed successfully after connection to a SQL server is restored.	12.0
41616	Lists all the Enterprise Vault databases that are accessible through a SQL listener, but have not yet been added to a SQL AlwaysOn availability group.	12.0
41619	Connection to the SQL server is temporarily broken. SQL commands will be retried after the connection is restored.	12.0
41620	The Veritas Information Classifier plug-in for Microsoft File Server Resource Manager returned an error.	12.0
41623	Folder shortcut URL unknown.	12.1
41624	Folder shortcut icon file location unknown.	12.1
41626	DSS Database script error.	12.2
45057	The Enterprise Vault NetApp File Placeholder service has started.	-
45058	The Enterprise Vault NetApp File Placeholder service has stopped.	-
45073	An unrecoverable error has occurred, the service will be shut down.	-

Table 12-1 *(continued)*

Event	Title	Added
45077	The slave process for the NetApp placeholder named: *name* is not responding and will NOT be restarted as it has exceeded *number* restarts in *number* minutes.	-
45079	The slave process for the NetApp placeholder server named: *name* has requested a restart but will NOT be restarted as it has exceeded *number* restarts in *number* minutes.	-
45080	The NetApp placeholder server for Filer: *filer* failed to configure FPolicy, error: *error*, the placeholder server will shutdown.	-
45081	The NetApp placeholder server for Filer: *filer* failed to start as the filer does not support Manage ONTAP V7.0.	-
45084	The NetApp C-Mode placeholder server for vserver: *name* failed to configure FPolicy.	-
45085	The NetApp placeholder server failed to detect the version for Filer: *name*.	-
45090	Failed to communicate through the privileged data access channel of the fileserver *name*. Restarting the NetApp placeholder process for the NetApp C-Mode file server. Restarting the NetApp.	-
45092	Failed to update the Vserver UUID for the NetApp C-Mode Vserver.	12.1
45336	The Data Classification Client could not connect to any of the Data Classification Servers configured.	-
45341	The Data Classification Client has not been configured properly.	-
45827	*Various*.	-
45828	*Various*.	-
45829	*Various*.	-
45830	Enterprise Vault SMTP message tracking error.	12.2

Enterprise Vault performance counters

This chapter includes the following topics:

- About performance counters

- Enterprise Vault Classification

- Enterprise Vault Database Files

- Enterprise Vault Databases

- Enterprise Vault::Directory

- Enterprise Vault Disk Location

- EnterpriseVault::Domino Journaling

- EnterpriseVault::Exchange Journaling

- Enterprise Vault IMAP Storage

- Enterprise Vault IMAP Storage operations

- Enterprise Vault Index Query Server

- Enterprise Vault Indexing

- Enterprise Vault Indexing Volumes Processing

- Enterprise Vault Partitions

- Enterprise Vault Skype for Business Archiving

- Enterprise Vault SMTP Archiving Task

- Enterprise Vault SMTP Holding Folder

- Enterprise Vault SMTP Service

- Enterprise Vault Storage

- Enterprise Vault::Vault Store Group

- Enterprise Vault::Vault Stores

- Enterprise Vault Websites

- Enterprise Vault Indexing Volumes Processing

About performance counters

This section lists the Enterprise Vault performance counters.

Enterprise Vault Classification

Table 13-1 Enterprise Vault Classification performance counters

Counter	Description
Items allowed for automatic expiry	The number of items that Enterprise Vault has allowed to be automatically expired as a result of classification.
Items allowed for user deletion	The number of items that Enterprise Vault has allowed users to delete as a result of classification.
Items blocked from automatic expiry	The number of items that Enterprise Vault has blocked from automatic expiry as a result of classification.
Items blocked from discard on classification	The number of items that classification has marked for deletion but that Enterprise Vault cannot delete because they are on legal hold.
Items blocked from user deletion	The number of items that Enterprise Vault has blocked users from deleting as a result of classification.
Items discarded on classification	The number of items that Enterprise Vault has discarded because classification has marked them for deletion.

Table 13-1   Enterprise Vault Classification performance counters *(continued)*

Counter	Description
Items failed classification	The number of items that Enterprise Vault has failed to classify.
Items successfully classified	The number of items that Enterprise Vault has passed for classification with a success result. The count includes any items that classification has marked for deletion, whether or not Enterprise Vault was able to discard them. Any items that are successfully classified but that Enterprise Vault later fails to index may be counted multiple times, as Enterprise Vault automatically retries the whole operation.

Enterprise Vault Database Files

Table 13-2   Enterprise Vault database file information

Counter	Description
Hours since last backup	Hours since last backup of the database file.
Database file location % used	Space used by the file as a percentage of total space.

Enterprise Vault Databases

Table 13-3 Enterprise Vault database connectivity counters

Counter	Description
Connectivity	Enterprise Vault database connectivity counters
	Available instances
	■ EnterpriseVaultAudit
	■ EnterpriseVaultDirectory
	■ EnterpriseVaultMonitoring
	■ One instance for each vault store group database (fingerprint database)
	■ One instance for each vault store database

Enterprise Vault::Directory

Table 13-4

Counter	Description
Directory DB back-up	Number of days since the Directory database was backed up
Directory DB log back-up	Number of days since the Directory database transaction log was backed up
Directory DB log size	Size in MB of the Directory DB transaction log
Directory DB log % used	% space used of the Directory DB transaction log
Vault Stores in back-up mode	Number of Vault Stores in back-up mode

Enterprise Vault Disk Location

Table 13-5   Enterprise Vault Disk Location disk used space performance
                     counters set

Counter	Description
Disk space % used	The percentage of space used. Available instances: ■ Application ■ Cache ■ Temporary

EnterpriseVault::Domino Journaling

Table 13-6   Counts of the journal mailboxes in Domino

Counter	Description
Inbox total	Count of inbox items.
Archivable items	Count of items that can be archived.
Archive pending	Count of items that are yet to be archived.
Failed messages	Count of items in the Enterprise Vault Journaling Service - Failed messages folder.
Archived items count	Number of items archived in last one hour.
Archived items total size	Total size of items archived in last one hour.
Archived items compressed size	Compressed size of items archived in last one hour.
Days since last back-up	Days since last back-up.

EnterpriseVault::Exchange Journaling

Table 13-7   Counts of the journal mailboxes in Exchange

Counter	Description
Inbox total	Count of inbox items.

Table 13-7   Counts of the journal mailboxes in Exchange *(continued)*

Counter	Description
Archivable items	Count of items that can be archived.
Archive pending	Count of items that are yet to be archived.
Failed to store	Count of items in the Enterprise Vault Journaling Service - Failed to store folder.
Failed to copy	Count of items in the Enterprise Vault Journaling Service - Failed to copy folder.
Failed DL expansion	Count of items in the Enterprise Vault Journaling Service - Failed DL expansion folder.
Failed external filter	Count of items in the Enterprise Vault Journaling Service - Failed external filter folder.
Invalid journal report	Count of items in the Enterprise Vault Journaling Service - Invalid journal report.
Above maximum size	Count of items in the Enterprise Vault Journaling Service - Above maximum size.
Archived items count	Number of items archived in last one hour.
Archived items total size	Total size of items archived in last one hour.
Archived items compressed size	Compressed size of items archived in last one hour.
Days since last back-up	Days since last back-up.

Enterprise Vault IMAP Storage

Note: The IMAP Storage performance counters were introduced in Enterprise Vault 11.0.1 CHF1.

These counters relate to the IMAPStorage application. They cover the item cache and application errors.

Table 13-8   Enterprise Vault IMAP Storage performance counters (Introduced in Enterprise Vault 11.0.1 CHF1)

Counter	Description
Application Errors	Number of errors since the IMAPStorage started that are not linked to storage errors. Storage errors are reported in the 'Enterprise Vault IMAP Storage operations' counters.
Cache size (MB)	Current total size of the file cache (MB).
IMAP Server Connections	Number of current connections between IMAPServer and IMAPStorage.
Number of items cached	Number of items stored in the cache.
Number of items removed from cache	Number of items that were removed since the IMAPStorage started.

Enterprise Vault IMAP Storage operations

Note: The IMAP Storage operations performance counters were introduced in Enterprise Vault 11.0.1 CHF1.

These counters are for all storage operations, such as archive, delete, and so on. There is one instance of each counter for each storage server.

Table 13-9   Enterprise Vault IMAP Storage operations (Introduced in Enterprise Vault 11.0.1 CHF1)

Counter	Description
Archive item operations	Outstanding requested archiving operations. For example, new messages added from the IMAP client application. There is one instance for each storage server and a total for all storage servers.
Archive item operations completed successfully	Total archive item operations that have completed successfully since the IMAP server started. There is one instance for each storage server and a total for all storage servers.

Table 13-9   Enterprise Vault IMAP Storage operations (Introduced in
                     Enterprise Vault 11.0.1 CHF1) *(continued)*

Counter	Description
Archive item operations failed	Total archive item operations that have failed since the IMAP server started.
	There is one instance for each storage server and a total for all storage servers.
Archive item operations per second	The rate of archive item operations in operations per second.
	There is one instance for each storage server and a total for all storage servers.
Average execution time for archive item operations	The mean time from the request to the completion of the archive item operations (seconds).
	There is one instance for each storage server and a total for all storage servers.
Average execution time for copy item operations	The mean time from the request to the completion of the copy item operations (seconds).
	There is one instance for each storage server and a total for all storage servers.
Average execution time for create folder operations	The mean time from the request to the completion of the create folder operations (seconds).
	There is one instance for each storage server and a total for all storage servers.
Average execution time for delete folder operations	The mean time from the request to the completion of the delete folder operations (seconds).
	There is one instance for each storage server and a total for all storage servers.
Average execution time for delete item operations	The mean time from the request to the completion of the delete item operations (seconds).
	There is one instance for each storage server and a total for all storage servers.

Table 13-9 Enterprise Vault IMAP Storage operations (Introduced in
Enterprise Vault 11.0.1 CHF1) *(continued)*

Counter	Description
Average execution time for fetch operations	The mean time from the request to the completion of the fetch operations (seconds).
	There is one instance for each storage server and a total for all storage servers.
Average execution time for folder status list operations	The mean time from the request to the completion of the folder status list operations (seconds).
	There is one instance for each storage server and a total for all storage servers.
Average execution time for folder status operations	The mean time from the request to the completion of the folder status operations (seconds).
	There is one instance for each storage server and a total for all storage servers.
Average execution time for idle operations	The mean time from the request to the completion of the idle operations (seconds).
	There is one instance for each storage server and a total for all storage servers.
Average execution time for non fetch operations	The mean time from the request to the completion of the non fetch operations (seconds).
	There is one instance for each storage server and a total for all storage servers.
Average execution time for rename folder operations	The mean time from the request to the completion of the rename folder operations (seconds).
	There is one instance for each storage server and a total for all storage servers.
Average execution time for select folder operations	The mean time from the request to the completion of the select folder operations (seconds).
	There is one instance for each storage server and a total for all storage servers.

Table 13-9   Enterprise Vault IMAP Storage operations (Introduced in Enterprise Vault 11.0.1 CHF1) *(continued)*

Counter	Description
Average execution time for update flag operations	The mean time from the request to the completion of the update flag operations (seconds). There is one instance for each storage server and a total for all storage servers.
Average execution time for fetch operations	The mean time that the fetch operations queued before been processed (seconds). There is one instance for each storage server and a total for all storage servers.
Average execution time for non fetch operations	The mean time that the non fetch operations queued before been processed (seconds). There is one instance for each storage server and a total for all storage servers.
Copy item operations	Outstanding copy operations. For example, messages copied from one archive folder to another. There is one instance for each storage server and a total for all storage servers.
Copy item operations completed successfully	Total copy item operations that have completed successfully since the IMAP server started. There is one instance for each storage server and a total for all storage servers.
Copy item operations failed	Total copy item operations that have failed since the IMAP server started. There is one instance for each storage server and a total for all storage servers.
Copy item operations per second	The rate of copy item operations in operations per second. There is one instance for each storage server and a total for all storage servers.

Table 13-9   Enterprise Vault IMAP Storage operations (Introduced in
                   Enterprise Vault 11.0.1 CHF1) *(continued)*

Counter	Description
Create folder operations	Outstanding new folder operations. For example, creating a new folder under the Inbox from the IMAP client application.
	There is one instance for each storage server and a total for all storage servers.
Create folder operations completed successfully	Total create folder operations that have completed successfully since the IMAP server started.
	There is one instance for each storage server and a total for all storage servers.
Create folder operations failed	Total create folder operations that have failed since the IMAP server started.
	There is one instance for each storage server and a total for all storage servers.
Create folder operations per second	The rate of create folder operations in operations per second.
	There is one instance for each storage server and a total for all storage servers.
Delete folder operations	Outstanding folder deletions. For example, delete a folder from the IMAP client application.
	There is one instance for each storage server and a total for all storage servers.
Delete folder operations completed successfully	Total delete folder operations that have completed successfully since the IMAP server started.
	There is one instance for each storage server and a total for all storage servers.
Delete folder operations failed	Total delete folder operations that have failed since the IMAP server started.
	There is one instance for each storage server and a total for all storage servers.

Table 13-9 Enterprise Vault IMAP Storage operations (Introduced in
Enterprise Vault 11.0.1 CHF1) *(continued)*

Counter	Description
Delete folder operations per second	The rate of delete folder operations in operations per second. There is one instance for each storage server and a total for all storage servers.
Delete Item operations	Outstanding requested deletions. For example, deleting messages from the IMAP client application. There is one instance for each storage server and a total for all storage servers.
Delete Item operations completed successfully	Total delete item operations that have completed successfully since the IMAP server started. There is one instance for each storage server and a total for all storage servers.
Delete Item operations failed	Total delete item operations that have failed since the IMAP server started. There is one instance for each storage server and a total for all storage servers.
Delete Item operations per second	The rate of delete item operations in operations per second. There is one instance for each storage server and a total for all storage servers.
Fetch operations	Outstanding fetch and retrieve operations. For example, number of messages retrieved for download to the IMAP client application. There is one instance for each storage server and a total for all storage servers.
Fetch operations completed successfully	Total fetch operations that have completed successfully since the IMAP server started. There is one instance for each storage server and a total for all storage servers.

Table 13-9 Enterprise Vault IMAP Storage operations (Introduced in Enterprise Vault 11.0.1 CHF1) *(continued)*

Counter	Description
Fetch operations failed	Total fetch operations that have failed since the IMAP server started.
	There is one instance for each storage server and a total for all storage servers.
Fetch operations per second	The rate of fetch operations in operations per second.
	There is one instance for each storage server and a total for all storage servers.
Folder status list operations	Outstanding operations to retrieve information for a set of folders, such as number of items, number of sub-folders.
	There is one instance for each storage server and a total for all storage servers.
Folder status list operations completed successfully	Total folder status list operations that have completed successfully since the IMAP server started.
	There is one instance for each storage server and a total for all storage servers.
Folder status list operations failed	Total folder status list operations that have failed since the IMAP server started.
	There is one instance for each storage server and a total for all storage servers.
Folder status list operations per second	The rate of folder status list operations in operations per second.
	There is one instance for each storage server and a total for all storage servers.
Folder status operations	Outstanding operations to retrieve information about a folder, such as number of items, number of sub-folders. For example, opening a folder in the IMAP client application.
	There is one instance for each storage server and a total for all storage servers.

Table 13-9 Enterprise Vault IMAP Storage operations (Introduced in Enterprise Vault 11.0.1 CHF1) *(continued)*

Counter	Description
Folder status operations completed successfully	Total folder status operations that have completed successfully since the IMAP server started. There is one instance for each storage server and a total for all storage servers.
Folder status operations failed	Total folder status operations that have failed since the IMAP server started. There is one instance for each storage server and a total for all storage servers.
Folder status operations per second	The rate of folder status operations in operations per second. There is one instance for each storage server and a total for all storage servers.
Idle operations	Outstanding background folder operations to update the items for an opened folder. For example, new, deleted, or updated (flags) messages are automatically updated in the client application. There is one instance for each storage server and a total for all storage servers.
Idle operations completed successfully	Total idle operations that have completed successfully since the IMAP server started. There is one instance for each storage server and a total for all storage servers.
Idle operations failed	Total idle operations that have failed since the IMAP server started. There is one instance for each storage server and a total for all storage servers.
Idle operations per second	The rate of idle operations in operations per second. There is one instance for each storage server and a total for all storage servers.

Table 13-9 Enterprise Vault IMAP Storage operations (Introduced in
Enterprise Vault 11.0.1 CHF1) *(continued)*

Counter	Description
Non fetch operations	Outstanding operations other than fetching. These operations include: Archiving, deleting, copying, updating flags of items; Creating, deleting, and renaming an archive folder; Opening, updating, and getting information about the contents of an archive folder There is one instance for each storage server and a total for all storage servers.
Queue size for fetch operations	Number of fetch operations waiting to be processed. There is one instance for each storage server and a total for all storage servers.
Queue size for non fetch operations	Number of non fetch operations waiting to be processed. There is one instance for each storage server and a total for all storage servers.
Rename folder operations	Outstanding folder rename operations. For example, rename a folder from the IMAP client application. There is one instance for each storage server and a total for all storage servers.
Rename folder operations completed successfully	Total rename folder operations that have completed successfully since the IMAP server started. There is one instance for each storage server and a total for all storage servers.
Rename folder operations failed	Total rename folder operations that have failed since the IMAP server started. There is one instance for each storage server and a total for all storage servers.
Rename folder operations per second	The rate of rename folder operations in operations per second. There is one instance for each storage server and a total for all storage servers.

Table 13-9 Enterprise Vault IMAP Storage operations (Introduced in Enterprise Vault 11.0.1 CHF1) *(continued)*

Counter	Description
Running tasks for archive operations	Number of active archive item operations against a storage server.
	There is one instance for each storage server and a total for all storage servers.
Running tasks for copy item operations	Number of active copy item operations against a storage server.
	There is one instance for each storage server and a total for all storage servers.
Running tasks for create folder operations	Number of active create folder operations against a storage server.
	There is one instance for each storage server and a total for all storage servers.
Running tasks for delete folder operations	Number of active delete folder operations against a storage server.
	There is one instance for each storage server and a total for all storage servers.
Running tasks for delete item operations	Number of active delete item operations against a storage server.
	There is one instance for each storage server and a total for all storage servers.
Running tasks for fetch operations	Number of active fetch operations against a storage server.
	There is one instance for each storage server and a total for all storage servers.
Running tasks for folder status list operations	Number of active folder status list operations against a storage server.
	There is one instance for each storage server and a total for all storage servers.
Running tasks for folder status operations	Number of active folder status operations against a storage server.
	There is one instance for each storage server and a total for all storage servers.

Table 13-9   Enterprise Vault IMAP Storage operations (Introduced in
Enterprise Vault 11.0.1 CHF1) *(continued)*

Counter	Description
Running tasks for idle operations	Number of active idle operations against a storage server.
	There is one instance for each storage server and a total for all storage servers.
Running tasks for non fetch operations	Number of active non fetch operations against a storage server.
	There is one instance for each storage server and a total for all storage servers.
Running tasks for rename folder operations	Number of active rename folder operations against a storage server.
	There is one instance for each storage server and a total for all storage servers.
Running tasks for select folder operations	Number of active select folder operations against a storage server.
	There is one instance for each storage server and a total for all storage servers.
Running tasks for update flag operations	Number of active update flag operations against a storage server.
	There is one instance for each storage server and a total for all storage servers.
Select Folder operations	Outstanding "open" folder operations. This operation finds all the messages that are in the folder. For example, opening a folder from the IMAP client application displays all the message headers.
	There is one instance for each storage server and a total for all storage servers.
Select Folder operations completed successfully	Total select folder operations that have completed successfully since the IMAP server started.
	There is one instance for each storage server and a total for all storage servers.

Table 13-9   Enterprise Vault IMAP Storage operations (Introduced in
Enterprise Vault 11.0.1 CHF1) *(continued)*

Counter	Description
Select Folder operations failed	Total select folder operations that have failed since the IMAP server started. There is one instance for each storage server and a total for all storage servers.
Select Folder operations per second	The rate of select folder operations in operations per second. There is one instance for each storage server and a total for all storage servers.
Update flag operations	Outstanding flag updates. For example, updating the Read flag on a message. There is one instance for each storage server and a total for all storage servers.
Update flag operations completed successfully	Total update flag operations that have completed successfully since the IMAP server started. There is one instance for each storage server and a total for all storage servers.
Update flag operations failed	Total update flag operations that have failed since the IMAP server started. There is one instance for each storage server and a total for all storage servers.
Update flag operations per second	The rate of update flag operations in operations per second. There is one instance for each storage server and a total for all storage servers.

Enterprise Vault Index Query Server

Table 13-10   Enterprise Vault Index Query Server

Counter	Description
Successful queries	The total number of queries successfully executed since the query server started.

Table 13-10 Enterprise Vault Index Query Server *(continued)*

Counter	Description
Successful queries per second	The rate at which the query server is processing successful queries.
Results	The total number of results retrieved since the query server started.
Results per second	The rate at which the query server is retrieving results.
Average query time (seconds)	The average time for a query to be processed by the query server.
Average search engine time (seconds)	The average time spent within the search engine when a query is processed. Only applies to queries against 64-bit indexes.
Queries in progress	The number of queries being processed by the query server.
Queued queries	The number of queries that are queued in the query server, waiting to be processed.
Failed queries	The total number of queries that have failed since the query server started.
Resource exhaustion failures	The total number of times a query encountered a delay or failure because of insufficient resources (normally memory) since the query server started. Only applies to queries against 64-bit indexes.
Search threads	The number of threads that are dedicated to processing queries. At any moment some of these threads may be executing searches and other threads may be idle, waiting for a new search.
Successful metadata store retrievals	The total number of successful metadata store retrievals since the query server started.
Failed metadata store retrievals	The total number of failed metadata store retrievals since the query server started.
Average metadata store retrieval time (seconds)	The average time spent retrieving data from the metadata store (as part of the processing of a query).

Enterprise Vault Indexing

Table 13-11   Enterprise Vault Indexing performance counters set

Counter	Description
Index location % used	Used space at the index location. Available instances: ■ One instance for each index location.
Index location connectivity state	Connectivity to the index location. Available instances: ■ One instance for each index location.

Enterprise Vault Indexing Volumes Processing

Table 13-12   Enterprise Vault Indexing Volumes Processing

Counter	Description
Item additions missing from the pipeline	Unexpected acknowledgments received. These may be duplicate acknowledgments supplied by the indexing engine.
Item additions already in the pipeline	Item additions already being processed. These may be duplicate acknowledgments supplied by the indexing engine.
Item deletions already in the pipeline	Unexpected acknowledgments received. These may be duplicate acknowledgments supplied by the indexing engine.
Item deletions missing from the pipeline	Deletions already being processed. These may be duplicate acknowledgments supplied by the indexing engine.
Item updates already in the pipeline	Unexpected acknowledgments received. These may be duplicate acknowledgments supplied by the indexing engine.
Item updates missing from the pipeline	Item updates already being processed. These may be duplicate acknowledgments supplied by the indexing engine.

Table 13-12   Enterprise Vault Indexing Volumes Processing *(continued)*

Counter	Description
Item deletions in the pipeline	Total item deletions currently being processed.
Item additions in the pipeline	Total item additions currently being processed.
Item updates in the pipeline	Total item updates currently being processed.
Work item throttling count	Work items currently suspended in a temporary throttled state.
Number of indexing agents	Work items actively being processed.
Synchronisation queue count	Index volumes currently waiting to be assigned to a work item for background synchronisation.
Synchronisation per second	Rate of index volumes added to the synchronisation queue.
Task queue count	Number of indexing tasks
Sub task queue count	Sub tasks (rebuild/synchronise/verify) waiting to be assigned to a work item.
Sub task per second	Rate of sub tasks added to the sub task queue.
Work item queue count	Work items waiting to be processed.
Work item per second	Rate of work items being added to the work items queue.
Delete index volumes queue	Number of index volumes queued for deletion.
Average agent processing time (seconds)	Average time a work item spends actively being processed.
Average synchronisation queue time (seconds)	Average time a background synchronisation request spends in the synchronisation queue.
Average sub task queue time (seconds)	Average time a sub task spends in the sub task queue.
Average task queue time (seconds)	Average time an indexing task spends waiting in the task queue.

Table 13-12   Enterprise Vault Indexing Volumes Processing *(continued)*

Counter	Description
Average work item queue time (seconds)	Average time a work item spends queued in the work items queue.
Average delete index volumes queue time (seconds)	Average time an index volume spends queued for deletion.
Item addition queue count	Number of item additions queued up for processing.
Item deletion queue count	Number of item deletions queued up for processing.
Item update queue count	Number of item updates queued up for processing.
Item addition queue size (KB)	Approximate size in memory of item additions queued for processing.
Item deletion queue size (KB)	Approximate size in memory of item deletions queued for processing.
Item update queue size (KB)	Approximate size in memory of item updates queued for processing.
Item additions submitted	Item additions submitted to the indexing engine since the indexing service was started.
Item additions submitted per second	Rate at which item additions have been submitted to the indexing engine.
Item updates submitted	Item updates submitted to the indexing engine since the indexing service was started.
Item updates submitted per second	Rate at which item updates have been submitted to the indexing engine.
Item deletions submitted	Item deletions submitted to the indexing engine since the indexing service was started.
Item deletions submitted per second	Rate of item deletions submitted to the indexing engine.
Item additions fetched	Item additions fetched from storage since the indexing service was started.
Item additions fetched per second	Rate of item additions fetched from storage.

Table 13-12 Enterprise Vault Indexing Volumes Processing *(continued)*

Counter	Description
Item updates fetched	Item updates fetched from storage since the indexing service was started.
Item updates fetched per second	Rate of item updates fetched from storage.
Item deletions fetched	Item deletions fetched from storage since the indexing service was started.
Item deletions fetched per second	Rate of item deletions fetched from the storage.
Item additions reloaded (pending)	Item additions reloaded to complete processing that was previously suspended. A rapidly increasing value may indicate an overloaded indexing engine.
Item updates reloaded (pending)	Item updates reloaded to complete processing that was previously suspended. A rapidly increasing value may indicate an overloaded indexing engine.
Item deletions reloaded (pending)	Item deletions reloaded to complete processing that was previously suspended. A rapidly increasing value may indicate an overloaded indexing engine.
Item additions acknowledged	Item additions fully processed by the indexing engine since the indexing service was started.
Item additions acknowledged per second	Rate of acknowledgments for item additions returned by the indexing engine.
Item updates acknowledged	Item updates fully processed by the indexing engine since the indexing service was started.
Item updates acknowledged per second	Rate of acknowledgments for item updates returned by the indexing engine.
Item deletions acknowledged	Item deletions fully processed by the indexing engine since the indexing service was started
Item deletions acknowledged per second	Rate of acknowledgments for item deletions returned by the indexing engine.
Item additions audited (successful)	Item additions that have been fully processed.

Table 13-12 Enterprise Vault Indexing Volumes Processing *(continued)*

Counter	Description
Item additions audited (successful) per second	Rate of item additions audited as 'successful'.
Item additions audited (failed)	Item additions that failed to be processed.
Item additions audited (failed) per second	Rate of item additions audited as 'failed'.
Item additions persisted (pending)	Item additions for which processing was deferred. A rapidly increasing value may indicate an overloaded indexing engine.
Item updates audited (successful)	Item updates that have been fully processed.
Item updates audited (successful) per second	Rate of item updates audited as 'successful'.
Item updates audited (failed)	Item updates that failed to be processed.
Item updates audited (failed) per second	Rate of item updates audited as 'failed'.
Item updates persisted (pending)	Item updates for which processing was deferred. A rapidly increasing value may indicate an overloaded indexing engine.
Item deletions audited (successful)	Item deletions that have been fully processed.
Item deletions audited (successful) per second	Rate of item deletions audited as 'successful'.
Item deletions audited (failed)	Item deletions that failed to be processed.
Item deletions audited (failed) per second	Rate of item deletions audited as 'failed'.
Item deletions persisted (pending)	Item deletions for which processing was deferred. A rapidly increasing value may indicate an overloaded indexing engine.
Stopping work items	Work items that have been signaled to stop.

Enterprise Vault Partitions

Table 13-13   Enterprise Vault counters for Vault Store partitions

Counter	Description
Hours since last backup	Hours since last backup of Vault Store partition.
Connectivity	Connectivity counters for Vault Store partitions.
Vault store partition location % used	Space used by Vault Store partition as percentage of total space.

Enterprise Vault Skype for Business Archiving

Table 13-14   Enterprise Vault Skype for Business Archiving performance counters

Counter	Description
Number of items exported	The number of conversations that Enterprise Vault has exported from the Skype for Business archiving database to the holding folder on the Enterprise Vault server.

Enterprise Vault SMTP Archiving Task

The SMTP Archiving task processes message files for both Enterprise Vault SMTP archiving, and Enterprise Vault Skype for Business archiving. SMTP messages and Skype for Business conversations are stored as .eml files. If the task archives .eml files for both Enterprise Vault SMTP archiving and Enterprise Vault Skype for Business archiving, then the performance counters for the task show the combined totals for both features.

Table 13-15   Enterprise Vault SMTP Archiving task performance counters

Counter	Description
SMTP messages archived	Number of .eml files that the Enterprise Vault SMTP Archiving task archived.

Table 13-15 Enterprise Vault SMTP Archiving task performance counters *(continued)*

Counter	Description
SMTP messages unable to archive	Number of .eml files that the Enterprise Vault SMTP Archiving task could not archive.
SMTP messages processed	Number of .eml files that the Enterprise Vault SMTP Archiving task processed. This includes data about .eml files that the task could not archive.
SMTP messages original size (bytes)	Total original size of .eml files that the Enterprise Vault SMTP Archiving task archived. (Bytes)
Maximum original size of SMTP messages (bytes)	Maximum original size of .eml files that the Enterprise Vault SMTP Archiving task archived. (Bytes)

Enterprise Vault SMTP Holding Folder

Table 13-16 Enterprise Vault SMTP holding folder counters set

Counter	Description
Disk space % used	Used space at the SMTP holding folder location.
Connectivity	Connectivity to the SMTP holding folder location.

Enterprise Vault SMTP Service

Table 13-17 Enterprise Vault SMTP service performance counters

Counter	Description
SMTP messages original size (bytes)	Total original size of messages received by the Enterprise Vault SMTP service. (Bytes)
Connections rejected	Number of connections rejected by the Enterprise Vault SMTP service since the service was started.

Table 13-17   Enterprise Vault SMTP service performance counters *(continued)*

Counter	Description
Concurrent connections	Number of concurrent connections to the Enterprise Vault SMTP service.
SMTP messages rejected	Number of connections rejected by the Enterprise Vault SMTP service since the service was started.
SMTP messages received	Number of SMTP messages received by the Enterprise Vault SMTP service since the service was started.

Enterprise Vault Storage

Table 13-18   Enterprise Vault Storage performance counters set

Counter	Description
Storage Expiry Deleted Items	Number of items that Storage Expiry has deleted.
Storage Queue Pending Length	Number of items queued for archiving.
Storage Queue Size(bytes)	Disk space in bytes used by the storage queue.
Storage Queue Total Length	Total number of items in the storage queue.

Enterprise Vault::Vault Store Group

Table 13-19   Monitoring information for the Enterprise Vault Directory database

Counter	Description
Vault Store Group DB back-up	Number of days since the Vault Store Group database was backed up.
	Available instances:
	■ One instance for each vault store group.

Table 13-19   Monitoring information for the Enterprise Vault Directory database
(continued)

Counter	Description
Vault Store Group DB log back-up	Number of days since the Vault Store Group database transaction log was backed up.
	Available instances:
	■ One instance for each vault store group.
Vault Store Group DB log size	Size in MB of the Vault Store Group database transaction log.
	Available instances:
	■ One instance for each vault store group.
Vault Store Group DB log % used Available instances: ■ One instance for each vault store group.	% space used of the Vault Store Group database transaction log.

Enterprise Vault::Vault Stores

Table 13-20   Monitoring information for Enterprise Vault Vault Stores

Counter	Description
Watchfile table size	Number of items in the Watchfile table for each Vault Store.
	Available instances:
	■ One instance for each vault store.
Journal archive table size	Number of items in the JournalArchive table for each Vault Store.
	Available instances:
	■ One instance for each vault store.
Journal delete table size	Number of items in the JournalDelete table for each Vault Store.
	Available instances:
	■ One instance for each vault store.

Table 13-20   Monitoring information for Enterprise Vault Vault Stores
(continued)

Counter	Description
Journal restore table size	Number of items in the JournalRestore table for each Vault Store Available instances: ■ One instance for each vault store.
Vault Store DB back-up	Number of days since the Vault Store database was backed up. Available instances: ■ One instance for each vault store.
Vault Store DB log back-up	Number of days since the Vault Store database transaction log was backed up. Available instances: ■ One instance for each vault store.
Vault Store DB log size	Size in MB of the Vault Store database transaction log. Available instances: ■ One instance for each vault store.
Vault Store DB log % used	Vault Store DB log % used. Available instances: ■ One instance for each vault store.

Enterprise Vault Websites

Table 13-21   Enterprise Vault Websites performance counters set

Counter	Description
Connectivity	State for the EVWebsites Connectivity. Available instances: ■ EVMOD_EVDOMINO ■ EVMOD_EVDOMINOHELP ■ EVMOD_EVDOMINOSEARCH ■ EVMOD_ENTERPRISEVAULT ■ EVMOD_ENTERPRISEVAULTAPI ■ EVMOD_EVINDEXING ■ EVMOD_EVSEARCHCLIENT ■ EVMOD_EVSEARCHSERVER ■ EVMOD_FSAREPORTING

Enterprise Vault Indexing Volumes Processing

Table 13-22   Enterprise Vault Indexing Volumes Processing

Counter	Description
Item additions missing from the pipeline	Unexpected acknowledgments received. These may be duplicate acknowledgments supplied by the indexing engine.
Item additions already in the pipeline	Item additions already being processed. These may be duplicate acknowledgments supplied by the indexing engine.
Item deletions already in the pipeline	Unexpected acknowledgments received. These may be duplicate acknowledgments supplied by the indexing engine.
Item deletions missing from the pipeline	Deletions already being processed. These may be duplicate acknowledgments supplied by the indexing engine.
Item updates already in the pipeline	Unexpected acknowledgments received. These may be duplicate acknowledgments supplied by the indexing engine.

Table 13-22   Enterprise Vault Indexing Volumes Processing *(continued)*

Counter	Description
Item updates missing from the pipeline	Item updates already being processed. These may be duplicate acknowledgments supplied by the indexing engine.
Item deletions in the pipeline	Total item deletions currently being processed.
Item additions in the pipeline	Total item additions currently being processed.
Item updates in the pipeline	Total item updates currently being processed.
Work item throttling count	Work items currently suspended in a temporary throttled state.
Number of indexing agents	Work items actively being processed.
Synchronisation queue count	Index volumes currently waiting to be assigned to a work item for background synchronisation.
Synchronisation per second	Rate of index volumes added to the synchronisation queue.
Task queue count	Number of indexing tasks
Sub task queue count	Sub tasks (rebuild/synchronise/verify) waiting to be assigned to a work item.
Sub task per second	Rate of sub tasks added to the sub task queue.
Work item queue count	Work items waiting to be processed.
Work item per second	Rate of work items being added to the work items queue.
Delete index volumes queue	Number of index volumes queued for deletion.
Average agent processing time (seconds)	Average time a work item spends actively being processed.
Average synchronisation queue time (seconds)	Average time a background synchronisation request spends in the synchronisation queue.
Average sub task queue time (seconds)	Average time a sub task spends in the sub task queue.

Table 13-22   Enterprise Vault Indexing Volumes Processing *(continued)*

Counter	Description
Average task queue time (seconds)	Average time an indexing task spends waiting in the task queue.
Average work item queue time (seconds)	Average time a work item spends queued in the work items queue.
Average delete index volumes queue time (seconds)	Average time an index volume spends queued for deletion.
Item addition queue count	Number of item additions queued up for processing.
Item deletion queue count	Number of item deletions queued up for processing.
Item update queue count	Number of item updates queued up for processing.
Item addition queue size (KB)	Approximate size in memory of item additions queued for processing.
Item deletion queue size (KB)	Approximate size in memory of item deletions queued for processing.
Item update queue size (KB)	Approximate size in memory of item updates queued for processing.
Item additions submitted	Item additions submitted to the indexing engine since the indexing service was started.
Item additions submitted per second	Rate at which item additions have been submitted to the indexing engine.
Item updates submitted	Item updates submitted to the indexing engine since the indexing service was started.
Item updates submitted per second	Rate at which item updates have been submitted to the indexing engine.
Item deletions submitted	Item deletions submitted to the indexing engine since the indexing service was started.
Item deletions submitted per second	Rate of item deletions submitted to the indexing engine.
Item additions fetched	Item additions fetched from storage since the indexing service was started.

Table 13-22   Enterprise Vault Indexing Volumes Processing *(continued)*

Counter	Description
Item additions fetched per second	Rate of item additions fetched from storage.
Item updates fetched	Item updates fetched from storage since the indexing service was started.
Item updates fetched per second	Rate of item updates fetched from storage.
Item deletions fetched	Item deletions fetched from storage since the indexing service was started.
Item deletions fetched per second	Rate of item deletions fetched from the storage.
Item additions reloaded (pending)	Item additions reloaded to complete processing that was previously suspended. A rapidly increasing value may indicate an overloaded indexing engine.
Item updates reloaded (pending)	Item updates reloaded to complete processing that was previously suspended. A rapidly increasing value may indicate an overloaded indexing engine.
Item deletions reloaded (pending)	Item deletions reloaded to complete processing that was previously suspended. A rapidly increasing value may indicate an overloaded indexing engine.
Item additions acknowledged	Item additions fully processed by the indexing engine since the indexing service was started.
Item additions acknowledged per second	Rate of acknowledgments for item additions returned by the indexing engine.
Item updates acknowledged	Item updates fully processed by the indexing engine since the indexing service was started.
Item updates acknowledged per second	Rate of acknowledgments for item updates returned by the indexing engine.
Item deletions acknowledged	Item deletions fully processed by the indexing engine since the indexing service was started
Item deletions acknowledged per second	Rate of acknowledgments for item deletions returned by the indexing engine.
Item additions audited (successful)	Item additions that have been fully processed.

Table 13-22   Enterprise Vault Indexing Volumes Processing *(continued)*

Counter	Description
Item additions audited (successful) per second	Rate of item additions audited as 'successful'.
Item additions audited (failed)	Item additions that failed to be processed.
Item additions audited (failed) per second	Rate of item additions audited as 'failed'.
Item additions persisted (pending)	Item additions for which processing was deferred. A rapidly increasing value may indicate an overloaded indexing engine.
Item updates audited (successful)	Item updates that have been fully processed.
Item updates audited (successful) per second	Rate of item updates audited as 'successful'.
Item updates audited (failed)	Item updates that failed to be processed.
Item updates audited (failed) per second	Rate of item updates audited as 'failed'.
Item updates persisted (pending)	Item updates for which processing was deferred. A rapidly increasing value may indicate an overloaded indexing engine.
Item deletions audited (successful)	Item deletions that have been fully processed.
Item deletions audited (successful) per second	Rate of item deletions audited as 'successful'.
Item deletions audited (failed)	Item deletions that failed to be processed.
Item deletions audited (failed) per second	Rate of item deletions audited as 'failed'.
Item deletions persisted (pending)	Item deletions for which processing was deferred. A rapidly increasing value may indicate an overloaded indexing engine.
Stopping work items	Work items that have been signaled to stop.