

# Unity Connection Disk Space Management



Document ID: 116438

Contributed by Scott Hills, Cisco TAC Engineer.  
Sep 04, 2013

## Contents

### Introduction

#### Common Configuration Pitfalls

- Message Aging
- Replication
- Voice Message Storage Capacity
- Logging
- Monitor with RTMT

#### Useful Commands

#### Defects to Avoid

#### Related Information

## Introduction

This document describes strategies used in order to ensure that you do not run out of disk space in Cisco Unity Connection (UC). As with most servers, it is always detrimental to run out of disk space during production, which can lead to loss of service and loss of potential revenue. In order to address this issue, this document covers how to monitor disk space utilization and problems you might encounter.

## Common Configuration Pitfalls

### Message Aging

The most common pitfall is to not set up Message Aging Policy. What occurs when Single Inbox (Unified Messaging) becomes involved is sometimes misunderstood. If you delete a message that is synced with Microsoft Outlook from UC, then the message on UC is moved to the Deleted Items folder. At this point, Message Aging must be applied to the mailbox. This allows the messages to be purged from the Deleted Items folder based on the time specified in the policy. The user can still access the phone options and choose to purge the Deleted Items folder. Refer to the Related Information section at the end of this document for more information.

### Replication

Do not leave replication broken in a cluster for an extensive period of time. Over a short period (weeks), it might not affect disk space; but, as time passes, the replication request items continue to build and affect disk space. Ensure that you are aware of your replication status. Some useful commands used in order to monitor replication are: *show cuc cluster status* and *utils dbreplication runtimestate*. If you plan to leave replication broken, it might be best to split the cluster apart, which disables replication. Refer to the Related Information section at the end of this document for more information.

## Voice Message Storage Capacity

Another planning point is to consider how many messages your users receive and the average length of each message. As stated in the documentation, UC generally provides twenty to thirty minutes of voicemail messages per user based on the number of users the configuration supports. Refer to the Design Guide and Supported Platform documentation in the Related Information section at the end of this document for more information.

## Logging

If you enter the *Show Status* command and notice the logging directory is low on space, complete these steps in order to free space:

1. Navigate to *Real-Time Monitoring Tool (RTMT) > Trace and Log Central*.
2. Check all the options in the check boxes.
3. Choose a range of a week.
4. Check the *Delete Collected Log Files from Server* check box.

## Monitor with RTMT

You can use RTMT in order to establish alerts when certain criteria are met. There are some parameters that are available for disk space. It is recommended that you use RTMT so that you can be proactive about possible issues on UC beyond disk space. Refer to the documentation for RTMT in the Related Information section at the end of this document for more information.

## Useful Commands

These commands are used in order to check your disk space:

- *show cuc dbserver disk*
- *show status*

## Defects to Avoid

Review these defects in order to be aware of problems you might encounter.

Cisco bug ID CSCsz72913 – There is a known issue where Split Brain resolution can lead to a problem with inodes that affects the ability to write to disk. This mainly affects Version 7.x.

Cisco bug ID CSCsx32588 – This relates to the issue where you have difficulty deleting messages, the Message Waiting Indicator (MWI) might not work, users might get a failsafe, or other unexpected issues are possible. The issue is that the *dyn\_dbs* fills up, and you cannot write to it. This issue is mainly seen in Version 7.x. Enter the *show cuc dbserver disk* command in order to look for *dyn* and *Free MB* column. If the output returns 0.0, then you are likely to encounter this issue.

Cisco bug ID CSCti68395 – If you disable the Internet Message Access Protocol (IMAP) service for security purposes, it causes the IMAP queue to build and leads to possible disk space issues.

## Related Information

- *Where Deleted Messages Go* in *Configuring Cisco Unity Connection 9x and Microsoft Exchange for Unified Messaging*

- *Controlling the Size of Mailboxes in Cisco Unity Connection 9.x*
- *Converting an 9.x Publisher Server to a Single Server Without a Connection Cluster*
- *Design Guide for Storage Capacity for Voice Messages*
- *Cisco Unity Connection 9.x Supported Platforms List* (Each platform lists approximate message storage, G-711 codec, minutes)
- *Cisco Unified Real-Time Monitoring Tool Administration Guide, Release 9.1(1)*
- *Technical Support & Documentation – Cisco Systems*

---

Updated: Sep 04, 2013

Document ID: 116438

---