CCI –Notification

Content

History

Version	Date	Adjustments
A	2000-10-12	Release R1.
B	2001-08-23	Release R2.
C	2001-10-18	Release R3.
C1	2001-11-27	Release R3/1
C2	2002-01-28	Minor changes for release R3/2. Changed default value for MailMemoryMegabyte to 10.
C3	2002-02-19	Release R3/3.
D	2002-02-19	Release R4A Added outdial description. Adding chapter 8 Deployment. Changed default LDAP port from 30380 to 389. Added description of internal parameter SMSCErrorAction. Added description of character conversion.
D1	2002-11-07	Release R4B. Added description of system notifications. Added test with different hardware. Added parameters for source address to SMS-C and changed default to no for DoOutdial.
E	2003-06-18	Release R6A

F	2003-06-30	Updated performance measurements. Added parameter DefaultNotificationFilter and DefaultNotificationFilter2
G	2004-11-05	Updated performance measurements
H	2005-05-12	Added DefaultNotificationFilter3. Removed obsolete MgtMon parameters and outdialinternaltimeout. Removed parameters found in OM-guide: smscerroraction, smsmaxconn. Updated chapter 3 including performance measurements.
I	2007-05-30	Move flushlog to OM.
J	2008-06-16	Illegal version I, changed to J.

1 Introduction

This document contains internal information about configuration and installation of NTF. The information here is too detailed or too little used to be in the CPI.

2 Configuration

2.1 Environment Variables

Name	Default value	Range	Description
LC_CTYPE	iso8859-1		This category specifies character classification, character conversion, and widths of multi-byte characters. When LC_CTYPE is set to a valid value, the calling utility can display and handle text and file names containing valid characters for that locale. Extended Unix Code (EUC) characters where any individual character can be 1, 2, or 3 bytes wide, and EUC characters of 1, 2, or 3 column widths. The default "C" locale corresponds to the 7-bit ASCII character set; only characters from ISO 8859-1 are valid.
LC_NUMERIC	iso8859-1		This category specifies the decimal and thousands delimiters.
LC_COLLATE	iso8859-1		This category specifies the character collation sequence being used.
LC_MONETARY	iso8859-1		This category specifies the

			monetary symbols and delimiters used for a particular locale.
LC_MESSAGES	iso8859-1		This category specifies the language of the message database being used. For example, an application may have one message database with French messages, and another database with German messages.

2.2 Configuration Files

NTF reads the language files and notification.cfg files at start-up.

2.2.1 Internal Parameters in notification.cfg

A value controlling the operation of NTF can either be set in a configuration file or be hard-coded into the source code of a program. This section describes a set of values in a category between these two extremes. They are normally not present in the configuration file, which means their default value, hard-coded into the program, is used. A parameter can belong to this category for a number of reasons:

- The value is not very important, and the existence of the parameter should not be allowed to clutter the description of more interesting parameters.
- The default value is believed to be very strong, on the border of being un-configurable.
- The value is difficult to determine and shall be changed only in close cooperation with the developers.

These parameters should not be shown in the customer documentation and are not present in the default configuration file.

Name	Default value	Range	Description
DefaultNotificationFilter	1;n;a;evf;;l;999;;;;;OFF;;		The notification filter to use if no filter in the user entry or COS matches.
DefaultNotificationFilter2	1;y;a;evfs;SMS;slamdown;998;;;;;SLAMDOWN;;		The notification filter for slamdowns.
DefaultNotificationFilter3	1;y;a;p;SMS;faxprintfail;999;;;;;FAXPRINTFAIL;;		The notification filter for faxprint fail messages.
MMSMaxConnection	10		The maximum number of simultaneous connections to each MMS-C.
MMSPostMaster	name@domain		Email address to use as receiver of all MMS notifications.
UseMMSPostM	NO		This parameter should be

aster			used for debugging. If set to YES MMSPostMaster has to be set with a valid email address. All MMS notifications will now be sent to this address.
IMAPBatchSize	100		The number of message identities read from the store in one operation.
DeletesBeforeExpunge	50		When NTF has deleted this many messages, an expunge operation is done.
MaxTimeBeforeExpunge	300		If this number of seconds have passed since the last expunge, a new expunge operation is done even if fewer than deletesBeforeExpunge messages have been deleted.
MailMemoryMegabyte	10		This parameter limits the amount of memory used to store notifications that could not be delivered due to communication problems with an external system. If the limit is exceeded, NTF stops checking for new notifications until the communication with the external system is OK again and memory has been freed.
SMSCErrorAction	Handle		Specifies how NTF shall handle error codes from the SMS-C in case it is not obvious to NTF how to eliminate the error. The possible values are (case insensitive): **handle** NTF retries, discards the notification or stops depending on the kind of error. **log** NTF just logs a message describing the error. **ignore** NTF ignores the error completely.
SMSMaxConn	10		The maximum number of connections and NTF

			instance may make to one SMS-C
OutdialInternalTimeout	300 seconds		There can only be one pending XMP request for a subscriber. That means that if a subscriber has a pending request that NTF hasn't received a response for a new odl notification can't be sent by NTF. This parameter determines how long a notification should be blocked before a new request can be sent. This parameter should normally not be modified.

3 Deployment

3.1 Hardware Requirements

NTFs peak performance has been measured by loading a lot (~100 000) mails into a total of 30 gnotification mailboxes (1000 users). After that NTF have been started and the time it takes to notify for all these mails has been measured by timing the first and last SMS notification in sms.log.

Type of Notification	Requests per second	Hardware used	CPU Average/Max
SMS-Subject	~77	Sun Fire v240 (2x1.002GHz); 2048 Mb real, 314 Mb free	~40%/~70%
SMS-Count (VCOUNT, FCOUNT, ECOUNT)	~17	Sun Fire v240 (2x1.002GHz); 2048 Mb real, 314 Mb free	~65%/~85%
SMS-Count (TCOUNT)	~33	Sun Fire v240 (2x1.002GHz); 2048 Mb real, 314 Mb free	~50%/~80%

3.2 Deployment Example

MS and NTF were installed on the same host. MUR was also situated on this host.

3.3 Load put on other Components

Used Component	Used interface	Type of usage	Relationship between input load and generated load on this component
MS			When using SMS-Count NTF puts a high load on MS.

4 Terminology

MER	Messaging Event Repository
MCR	Messaging Component Register
MDR	Message Detail Record
MgtMon	Management and Monitoring subsystem
MIB	Management Information Base
MUR	Messaging User Register
NTF	Notification Component
RADIUS-MA	Remote Authentication Dial In User Services for Messaging Accounting
MS	Message Store
SNMP	Simple Network Management Protocol
SMS	Short Message Service.