Source: SA5 (Telecom Management)

Title: CR 32341-3 Notification Log (NL) IRP

Document for: Approval

Agenda Item: 7.5.3

Doc-1st- Level	Spec	CR	R	Phase	Subject	Ca	VerCr	Doc-2nd- Level	Workitem
SP- 050037	32.341	001		Rel-6	Add file type requirements - Align with FTIRP IS in TS 32.342	F	6.0.0	S5-056085	OAM-NIM
SP- 050037	32.343	002		Rel-6	IDL incompliant to the style guide	F	6.1.0	S5-056066	OAM-NIM

	Telecom Management) bon, PORTUGAL, 24 - 28 January 2005	Tdoc							
CHANGE REQUEST									
ж	32.343 CR 002 #rev - *	Current version: 6.1.0 [#]							
For <u>HELP</u> on us	sing this form, see bottom of this page or look at the	pop-up text over the X symbols.							
Proposed change a	uffects: UICC apps ೫ ME Radio Ac	cess Network X Core Network X							
Title: ដ	IDL incompliant to the style guide								
Source: ೫	SA5 (huangsq@zte.com.cn)								
Work item code: ೫	OAM-NIM	Date: ₩ 28/01/2005							
Category: ₩	 F Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP <u>TR 21.900</u>. 	Release: %Rel-6Use one 0of the following releases: 22(GSM Phase 2)896(Release 1996)R97(Release 1997)R98(Release 1998)R99(Release 1999)Rel-4(Release 4)Rel-5(Release 5)Rel-6(Release 7)							
Reason for change	: X The IDL does not reflect the format recomme 32.150).	nded by the style guide (TS							
Summary of chang	e: ೫ Add double slash between " #endif " and the I	macro.							
Consequences if not approved:	He IDL won't conform to the styleguide, and compilers (e.g., idlj.exe).	will compile erros when using java							
Clauses affected:	육 Annex A								
Other specs affected:	YN%XXOther core specificationsXTest specificationsXO&M Specifications								
Other comments:	¥								

Annex A (normative): IDL specifications

// File: FileTransferIRPConstDefs.idl

A.1 IDL specification (file name "FileTransferIRPConstDefs.idl")

```
#ifndef _FILETRANSFERIRPCONSTDEFS_IDL_
#define _FILETRANSFERIRPCONSTDEFS_IDL_
#include "TimeBase.idl"
// This statement must appear after all include statements
#pragma prefix "3gppsa5.org"
/* ## Module: FileTransferIRPConstDefs
This module contains commonly used definitions for FileTransferIRP.
* /
module FileTransferIRPConstDefs
  enum ResultType {OK, Failure};
 typedef TimeBase::UtcT UTCTimeType;
 enum LocationChoice {Directory, URL};
  //The FileLocationType may be a directory path or a URL
 union FileLocationType switch (LocationChoice)
  ł
   case Directory: string fileLocationDirectory;
   /* e.g. \\202.112.101.1\D:\user\performanceFiles\<fileName> */
   case URL: string fileLocationURL;
    /* e.g. ftp://nms.telecom_org.com/datastore/<fileName> */
  };
 typedef unsigned long FileSizeType; //the unit is byte
  typedef string FileCompressionType;
  typedef string FileFormatType;
 struct FileInfoType
  ł
   FileLocationType fileLocation;
   FileSizeType fileSize;
   UTCTimeType fileReadyTime;
   UTCTimeType fileExpirationTime;
   FileCompressionType fileCompression;
   FileFormatType fileFormat;
 };
  typedef sequence<FileInfoType> FileInfoListType;
 const short PMManagementDataType = 1;//Performance Management
 const short CMManagementDataType = 2;//Configuration Management
  const short IMManagementDataType = 3;//Inventory Management
 const short TMManagementDataType = 4;//Test Management
 const short CTManagementDataType = 5;//Subscriber & Equipment Trace
  const short NLManagementDataType = 6;//Notification Log
 const short CGManagementDataType = 7;//Charging
 const short OTManagementDataType = 8;//Other Types
  /*
 Define the parameters specified in the notifyFileReady
 and notifyFilePreparationError notification.
```

```
*/
interface AttributeNameValue
{
    const string FILE_INFO_LIST = "FILE_INFO_LIST";
    const string ADDITIONAL_TEXT = "ADDITIONAL_TEXT";
    const string REASON = "REASON";
    };
};
#endif // _FILETRANSFERIRPCONSTDEFS_IDL_
```

A.2 IDL specification (file name "FileTransferIRPSystem.idl")

```
// File: FileTransferIRPSystem.idl
#ifndef _FILETRANSFERIRPSYSTEM_IDL_
#define _FILETRANSFERIRPSYSTEM_IDL_
#include "ManagedGenericIRPConstDefs.idl"
#include "ManagedGenericIRPSystem.idl'
#include "FileTransferIRPConstDefs.idl"
// This statement must appear after all include statements
#pragma prefix "3gppsa5.org"
/* ## Module: FileTransferIRPSvstem
This module implements capabilities of FileTransferIRP.
_____
*/
module FileTransferIRPSystem
  exception InvalidTimes { string reason; };
 exception InvalidFileInfoList { string reason; };
  /*
  System fails to complete the operation. System can provide reason
  to qualify the exception. The semantics carried in reason
  is outside the scope of this IRP.
 */
  exception ListAvailableFiles { string reason; };
 exception FileDownloadIndication { string reason; };
  exception GetFileTransferIRPVersions { string reason; };
 exception GetFileTransferIRPOperationsProfile { string reason; };
  exception GetFileTransferIRPNotificationsProfile { string reason; };
  */
   interface FileTransferIRP
   {
     / 3
    * IRPManager invoke this operation to get the files information
    * /
    FileTransferIRPConstDefs::ResultType
                                           list_available_files(
      in short managementDataType,
      in FileTransferIRPConstDefs::UTCTimeType beginTime,
      in FileTransferIRPConstDefs::UTCTimeType endTime,
      out FileTransferIRPConstDefs::FileInfoListType fileInfoList
    raises (ListAvailableFiles, InvalidTimes,
      ManagedGenericIRPSystem::InvalidParameter);
     * IRPManager invoke this operation to indicate completion of downloading files to IRPAgent
     * /
    FileTransferIRPConstDefs::ResultType
                                           file_download_indication(
      in FileTransferIRPConstDefs::FileInfoListType fileInfoList
    raises (FileDownloadIndication, InvalidFileInfoList,
      ManagedGenericIRPSystem::OperationNotSupported);
```

```
/**
      * Return the list of all supported FileTransferIRP versions.
      */
      ManagedGenericIRPConstDefs::VersionNumberSet get_FileTransfer_IRP_versions (
      raises (GetFileTransferIRPVersions);
      /**
      * Return the list of all supported operations and their supported
      * parameters for a specific FileTransferIRP version.
      ManagedGenericIRPConstDefs::MethodList get_FileTransfer_IRP_operations_profile (
         in ManagedGenericIRPConstDefs::VersionNumber iRPVersion
      )
      raises (GetFileTransferIRPOperationsProfile,
              ManagedGenericIRPSystem::OperationNotSupported,
              ManagedGenericIRPSystem::InvalidParameter);
      /**
      * Return the list of all supported notifications and their supported
      * parameters for a specific FileTransferIRP version.
      ManagedGenericIRPConstDefs::MethodList get_FileTransfer_IRP_notifications_profile
      (
         in ManagedGenericIRPConstDefs::VersionNumber iRPVersion
      raises (GetFileTransferIRPNotificationsProfile,
              ManagedGenericIRPSystem::OperationNotSupported,
              ManagedGenericIRPSystem::InvalidParameter);
   };
#endif // _FILETRANSFERIRPSYSTEM_IDL_
```

A.3 IDL specification (file name "FileTransferIRPNotifications.idl")

// File: FileTransferIRPNotifications.idl

};

```
#ifndef _FILETRANSFERIRPNOTIFICATIONS_IDL_
#define _FILETRANSFERIRPNOTIFICATIONS_IDL_
#include "FileTransferIRPConstDefs.idl"
#include "NotificationIRPConstDefs.idl"
#include "NotificationIRPNotifications.idl"
// This statement must appear after all include statements
#pragma prefix "3gppsa5.org"
/* ## Module: FileTransferIRPNotifDefs
This contains the specification of notifications of FileTransferIRP.
_____
*/
module FileTransferIRPNotifications
{
   * Constant definitions for the FileReady notification
   * /
  interface notifyFileReady: NotificationIRPNotifications::Notify
   {
    const string EVENT_TYPE = "notifyFileReady";
     /**
    * This constant defines the name of the fileInfoList property,
    * which is transported in the filterable_body fields.
     * The data type for the value of this property is
     * FileTransferIRPConstDefs::FileInfoListType.
```

```
* /
    const string FILE_INFO_LIST =
        FileTransferIRPConstDefs::AttributeNameValue::FILE_INFO_LIST;
    /**
    * This constant defines the name of the additionalText property,
     * which is transported in the filterable_body fields.
    \ast The data type for the value of this property is string.
    */
    const string ADDITIONAL_TEXT =
        FileTransferIRPConstDefs::AttributeNameValue::ADDITIONAL_TEXT;
    };
   /**
   * Constant definitions for the FilePreparationError notification
   */
  interface notifyFilePreparationError:
      NotificationIRPNotifications::Notify
   {
    const string EVENT_TYPE = "notifyFilePreparationError";
     /**
    * This constant defines the name of the fileInfoList property,
    * which is transported in the filterable_body fields.
     * The data type for the value of this property is
     * FileTransferIRPConstDefs::FileInfoListType.
    */
    const string FILE_INFO_LIST =
        FileTransferIRPConstDefs::AttributeNameValue::FILE_INFO_LIST;
     /**
    * This constant defines the name of the reason property,
     * which is transported in the filterable_body fields.
     * The data type for the value of this property is string.
    */
    const string REASON =
        FileTransferIRPConstDefs::AttributeNameValue::REASON;
    /**
    * This constant defines the name of the additionalText property,
     * which is transported in the filterable_body fields.
     * The data type for the value of this property is string.
    */
    const string ADDITIONAL_TEXT =
        FileTransferIRPConstDefs::AttributeNameValue::ADDITIONAL_TEXT;
    };
};
```

#endif //__FILETRANSFERIRPNOTIFICATIONS_IDL_

End of change in Annex A

Annex B (informative): Change history

Change history										
Date	Date TSG # TSG Doc. CR Rev Subject/Comment				Old	New				
Mar 2004	S_23	SP-040127			Submitted to TSG SA#23 for Information	1.0.0				
Sep 2004	S_25	SP-040563			Submitted to TSG SA#25 for Approval	2.0.0	6.0.0			
Dec 2004	S_26	SP-040800	001		Correct mapping of IS-defined non-filterable parameters to SS- defined non-filterable fields - Align IDL style in FT IRP CORBA SS with IDL Style Guide in 32.150	6.0.0	6.1.0			

3GPP TSG-SA5 (Telecom Management) Meeting #41 Lisbon, PORTUGAL, 24 - 28 January 2005

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ж	32.341	CR 001	ж ге v	-	ж	Current vers	ion:	6.0.0	ж
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Proposed chang	e affects:	UICC apps೫	ME	Rad	dio Ad	ccess Networ	k X	Core Ne	twork X
Title:	発 <mark>Add file t</mark>	ype requiremer	ts - Align with	FTIRF	<mark>P IS i</mark>	n TS 32.342			
Source:	೫ <mark>SA5</mark> (hua	angsq@zte.com	ı.cn)						
Work item code:	<mark>೫ OAM-NIN</mark>	Л				<i>Date:</i> ೫	28/0	01/2005	
Category:	F (con A (con B (ad) C (fur D (ed) Detailed ex	the following cat rection) responds to a co dition of feature), octional modificati itorial modificatio planations of the 3GPP <u>TR 21.90</u>	orrection in an ea ion of feature) n) above categorie		elease	Release: ¥ Use <u>one</u> of Ph2 P9 R96 R97 R98 R99 Rel-4 Rel-5 Rel-6 Rel-7	the foi (GSM (Relea (Relea (Relea (Relea (Relea (Relea	-	ases:
Reason for chan		fication log and						rement, w	hich
	nave	e been defined	as INL and "C	r res	spect	ively in FTIRE	- 15.		

_	have been defined as "NL" and "CF" respectively in FTIRP IS.						
Summary of change: ℜ	Add Notification log and charging file in file type requirement, add corresponding reference in clause 2, correct a minor error in general requirements.						
Consequences if #							
not approved:	file type which have already defined in FTIRP IS can not find a corresponding requirement.						
Clauses affected: #	2, 5.1 and 5.2						
Other specs %							
affected:	X Test specifications X O&M Specifications						
Other comments: %							

Change in Clause 2

2 References

The following documents contain provisions that, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.
- •••
- [8] 3GPP TS 32.41x-series: "Telecommunication management; Performance Management (PM) Integration Reference Point (IRP)".
 [9] 3GPP TS 32.421: "Telecommunication management; Subscriber and equipment trace: Trace concepts and requirements".
 [10] 3GPP TS 32.61x-series: Telecommunication management; Configuration Management (CM); Bulk CM Integration Reference Point (IRP)".
 [11] 3GPP TS 32.240: "Telecommunication management; Charging management; Charging architecture and principles".

End of Change in Clause 2

Change in Clause 5.1 and 5.2

5.1_1_General requirements for File Transfer IRP

The FT IRP shall ensure preservation of file content:

- The used file transfer protocol implementation shall preserve the formatting of the file during exchange.
- The used file transfer protocol implementation shall preserve the encoding of the file during exchange.

NOTE 1: Above requirement(s) are considered as being satisfied by FTP.

The FT IRP shall support the following file transfer protocols:

- FTP.
- SFTP

NOTE 2: SFTP providing initial security capabilities, which may be complemented by additional security features that might be added in future versions of the present document).

The FT IRP shall specify all necessary descriptive file information and parameters, to enable exchange of files between IRPManager and IRPAgent and to ensure respective file management capabilities (such as listing).

File Name conventions:

- In the context of this File Transfer IRP an overall applicable file name convention should be specified, ensuring the use of meaningful and uniform names of files generated by various IRP's. This convention should reuse the current PM File Naming Conventions to the greatest extent possible [7].
- This file name convention should address issues with potential Operating System based changes in file names during or after file exchange (e.g. upper case / lower case).
- The file name shall contain the file expiration date

5.22____File type requirements

The FT IRP shall support the exchange and management/maintenance of the following file types:

- Performance measurement results as defined in [7] and [8].
- Test results as defined in [6].
- Bulk CM files as defined in [10].
- Call trace records as defined in [9].
- Notification log as defined in [5].
- Charging files as defined in [11].
- Vendor-specific files containing management information.

Subsequently this File Transfer IRP shall consider requirements from management applications listed above.

Future 3GPP management information file types shall be supported as well (e.g. notification log files, inventory information).

End of Change in Clause 5.1 and 5.2

Annex A (informative): Change history

Change history										
Date TSG # TSG Doc. CR Rev Subject/Comment Old I										
Jun 2003	S_20	SP-030295			Submitted to TSG SA#20 for information	1.0.0				
Mar 2004	S_23	SP-040124			Submitted to TSG SA#23 for Approval	2.0.0	6.0.0			