

Network Resource Fulfillment - DDP IA

TMF612_NRF
Version 1.2



April, 2013

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The actual content of the Network Resource Fulfillment - DDP IA is available in the specific set of documents of the IA directory.

1 IPR Releases and Patent Disclosure

There are no known IPR claims on the material in this document. As per the TM Forum bylaws, any TM Forum member company that has IPR claims on this or any TM Forum specification needs to make the claims known to the TM Forum membership immediately.

2 Administrative Appendix

This Appendix provides additional background material about the TM Forum and this document.

2.1 Use and Extension of a TM Forum Business Agreement

This set of documents defines a technology-neutral model of the artifacts related to Network Resource Fulfillment and constitutes the Information Agreement for the corresponding entities: TMF612_NRF. It has been elaborated from the Business Agreement document. While this Information Agreement contains sufficient information to be a “stand alone” document, it is better read together with the Business Agreement document: TMF518_NRF.

It is expected that this document will be used:

- As the foundation for a TM Forum Interface Implementation Specifications (IIS)
- To facilitate information agreement between Service Providers and vendors
- As input to a service Provider's Request for Information / Request for Proposal (RFI/RFP—RFX)
- As input for vendors developing COTS products
- As a source of information for other bodies working in this area

2.2 Document History

Version	Date Modified	Description of changes
1.0	May 2008	This is the first version of the document and as such, there are no changes to report.
1.1	September 2011	<ul style="list-style-type: none">• Data Object Classes::Associations::HasSubordinate Made the subordinateOS side of the relationship navigable.• Data Object Classes::Associations::SncHasZEndGtps Made the GroupTerminationPoint (zEndTpList) side of the relationship navigable.• Associations::RouteChangeNotificationHasRoute Relationship moved to Notifications::Associations and missing Route object class added.

		<ul style="list-style-type: none"> Data Object Classes::Equipment::ituArcStateAndStatusList, Data Object Classes::EquipmentHolder::ituArcStateAndStatusList, Data Object Classes::FlowDomain::ituArcStateAndStatusList; Data Object Classes::FlowDomainFragment::ituArcStateAndStatusList, Data Object Classes::GroupTerminationPoint::ituArcStateAndStatusList, Data Object Classes::OperationsSystem::ituArcStateAndStatusList, Data Object Classes::ManagedElement::ituArcStateAndStatusList, Data Object Classes::MatrixFlowDomain::ituArcStateAndStatusList, Data Object Classes::MultiLayerSubNetwork::ituArcStateAndStatusList, Data Object Classes::SubNetworkConnection::ituArcStateAndStatusList, Data Object Classes::TerminationPoint::ituArcStateAndStatusList, Data Object Classes::TopologicalLink::ituArcStateAndStatusList: multiplicity changed from [*] to [0..1]; default value deleted. Associations::CcHasZEndGtps Relationship added. Data Object Classes::SubNetworkConnection::correlationIdentifier Text "Changes in the value of this attribute lead to an AVC notification." deleted from documentation. Data Object Classes::Associations::GtpContainsCtps Made listOfTps public. Renamed listOfTps to "containedTpRefList". Made relationship non-abstract. Data Object Classes::Associations::GtpIsMemberOfTpPool Made relationship name compliant to upper camel case. Made tpPoolRef non-navigable and removed the role name. Data Object Classes::TrafficConditioningProfile Inheritance relationship added between TrafficConditioningProfile and CommonResourceInfo.
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		<ul style="list-style-type: none"> • Type Definitions::CrossConnect::connectionId::Documentation Current documentation "This attribute represents the identifier of the associated Connection." replaced by "This attribute represents the control plane identifier. It corresponds to the Connection Name attribute in G.7713. Note that also the Cross Connection points to its superior Connection." To align it with the IIS description. • Data Object Classes::FlowDomainFragment::a/zEndTpDataList TerminationPointData associated as type to aEndTpDataList and zEndTpDataList. • Data Object Classes::SubNetworkConnection::a/zEndTpDataList TerminationPointData associated as type to aEndTpDataList and zEndTpDataList. • Data Object Classes::FlowDomainFragment: Traceability added to the description. • Data Object Classes::FlowDomainFragment: asapRef attribute added. • Data Object Classes::SnclsCharacterisedByRoutes: Association made non-navigable; i.e., route attribute removed from SubNetworkConnection. • Data Object Classes::TopologicalLink: Naming relationship to FlowDomain added. • Data Object Classes::OperationsSystem: "Manages" and "Offers" relationships added. Corresponding class diagram (NRF OS Relationships Class Diagram) created. • Data Object Classes::Equipment::SupportedBy relationship: made non-navigable. • Data Object Classes::Equipment::Supports relationship: made non-navigable. • Data Object Classes::OperationsSystem::HasSubordinate relationship: made non-navigable. • Data Object Classes::TerminationPoint::AssociatedWith relationship: made non-navigable. • Data Object Classes::TransmissionDescriptor::serviceCategory: added with profile=corba. • Data Object Classes::TransmissionDescriptor::conformanceDefinition: added with profile=corba.
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		<ul style="list-style-type: none">• Type Definitions::InventoryData: moved from MRI DDP.• Type Definitions::InventoryData: defined and corresponding "Resource Inventory Layout Class Diagram" added.• Data Object Classes::SncHasAEndGtps: Made aEndTpList non navigable.• Data Object Classes::SncHasZEndGtps: Made zEndTpList non navigable.• Notifications::SoftwareBackupStatusNotification::meName: Deleted.• Notifications::SoftwareBackupStatusNotification::neTime: Deleted.• Notifications::SoftwareBackupStatusNotification::emsTime: Deleted.• Notifications::SoftwareBackupStatusNotification: Inherits from EventInformation instead of CommonEventInformation.
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1.2	April 2013	<ul style="list-style-type: none"> • Data Object Classes::Call added • Data Object Classes::MultiLayerSubNetworkPointPool added • Data Object Classes::MultiLayerSubNetworkPointPoolLink added • Data Object Classes::LayeredSubNetworkPointPool added • Data Object Classes::SubNetworkPointPool added • Data Object Classes::SubNetworkPoint added • Data Object Classes::LayeredSubNetworkPointPoolLink added • Data Object Classes::SubNetworkPointPoolLink added • Data Object Classes::MultiLayerRoutingArea added • Data Object Classes::Connection added • Data Object Classes::ConnectionParameterProfile added • Data Object Classes::ConnectionTerminationPoint::serverTpRef added • NRF Termination Points Class Diagram added • Type Definitions::CallState added • Type Definitions::CallEndType added • Type Definitions::CallParameterProfile added • Type Definitions::DiversityConstraints added • Type Definitions::LevelOfEffort added • Type Definitions::DiversityViolations added • Type Definitions::RoutingAreaLevel added • Type Definitions::DiversityInfo added • Type Definitions::SharedResource added • Type Definitions::InterfaceType added • Type Definitions::LayeredRoutingArea added • Type Definitions::RoutingConstraintEffort added • Type Definitions::ConnectionType added
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		<ul style="list-style-type: none"> • Type Definitions::CrossConnect::aEndTpRefList: Description enhanced by "If the cross connection represents a Control Plane (Routing Node) connection, the end points are the SNPs." • Type Definitions::CrossConnect::zEndTpRefList: Description enhanced by "If the cross connection represents a Control Plane (Routing Node) connection, the end points are the SNPs." • Type Definitions::OperationsSystemInventory::managesMlraRefList added • Type Definitions::OperationsSystemInventory::managesCallRefList added • Type Definitions::OperationsSystemInventory::managesMlsnppRefList added • Type Definitions::OperationsSystemInventory::managesMlsnpplinkRefList added • Type Definitions::ManagementDomainInventory::mlraList added • Type Definitions::ManagementDomainInventory::callList added • Type Definitions::ManagementDomainInventory::mlsnppList added • Type Definitions::ManagementDomainInventory::mlsnppLinkList added • Type Definitions::MultiLayerRoutingAreaInventory added • Type Definitions::ConnectionInventory added • Type Definitions::CallInventory added • Type Definitions::MlsnppInventory added • Type Definitions::MlsnppLinkInventory added • Type Definitions::SignallingProtocol added
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2.4 Acknowledgments

This document was prepared by the members of the TM Forum mTOP RM team.