HP NGOSS Software

Incident & Problem Management Extension Datasheet

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The HP NGOSS Incident & Problem Management Extension provides a set of ITSM functional enhancement solution in telecom domain. The solution is implemented based on HP Service Manager7.11/9.20.

Key features and benefits

The HP NGOSS Incident & Problem Management Extension offers the service provider a wide range of potential benefits. It

- Predefine category, domain and sub-domain used in Telecom ITSM domain.
- Develop an priority algorithm to seek the highest possible priority (based on the service hierarchy and location).
- Enables the simultaneous support of several interventions for the same incident and therefore the configuration element in connection with the incident, to expedite its resolution
- Service Manager Service Desk template definition (ESS) for the important business customers.
- Uses SOA PE Manager and OSS/J (JSR 91 Trouble Ticket) adapter to manage the customer sessions which spread in different spaces and give the customer better Economies of Scale
- Provide Out-of-the-box Telecom CI type, attributes and relationship information based on information within the TMForum SID, the HP Telco Universe as well as project knowledge. Definition of how the solution ties in with the Telco Universe and uCMDB.
- Integration and federation of data from a sources such as inventory management systems (Telcordia Granite) as well as free-form sources such as CSV files into Service Manager via a common interface such as uCMDB and UTM. Features include data ETL (preparation, parsing, analysis, mapping, comparison, committing).

Introduction

HP OSS Solutions provide a complete solution from HP and its partners that allow easy integration of all components in the assurance, fulfillment and billing/usage processes. It includes hardware, software and services. HP OSS Solutions provide greater visibility and direct control over the entire service lifecycles. HP OSS Solutions can deal with the new converged infrastructures consisting of telecom networks and IT systems. This allows the easy and comprehensive management a broad variety of services and infrastructures, including MPLS, SDP, IPTV, IMS and other next generation services in both mobile and fixed networks.
HP OSS Solutions implement a Service Oriented Architecture that uses adapters to expose high-level normalized functions as business services. By using business processes to link together the exposed business services, HP delivers an OSS solution that supports the business.

HP Service Manager Software

HP Service Manager Software (HPSM) is a comprehensive and fully integrated IT service management software suite that enables IT to improve service levels, balance resources and control costs. With embedded ITIL-based best practices, Service Manager lets you quickly deploy consistent, integrated work processes across every part of your IT organization. From the moment a call comes into the service center, through incident, problem, change and release management, every service management process is automated and optimized. Request, contract, catalog and service level management extend value with this comprehensive suite.

HPSM has been awarded Pink Elephant's Enhanced PinkVerify status, signifying the product's ability to deliver the quality and cost savings expected of ITIL-aligned service management initiatives.

HP Service Manager represent a comprehensive answer to the challenge of running large scale, multi-technology networks efficiently, responsively and profitably. This product family has been extensively proven in a wide range of operator environments, including the very largest Tier1 Carriers.

Features

The Problem Management Telecom Solution Package provides enhanced function for Telecom customers based on HP Service Manager. It provides the following enhancement.

- Incident Management Enhancement
- Intervention Management for extend Incident Management.
- Configuration Management Enhancement.
- Integration with HP SOA Manager
- VIP Customer Self Service
- Generic Data Loading tool

Figure1. Problem Management Architecture
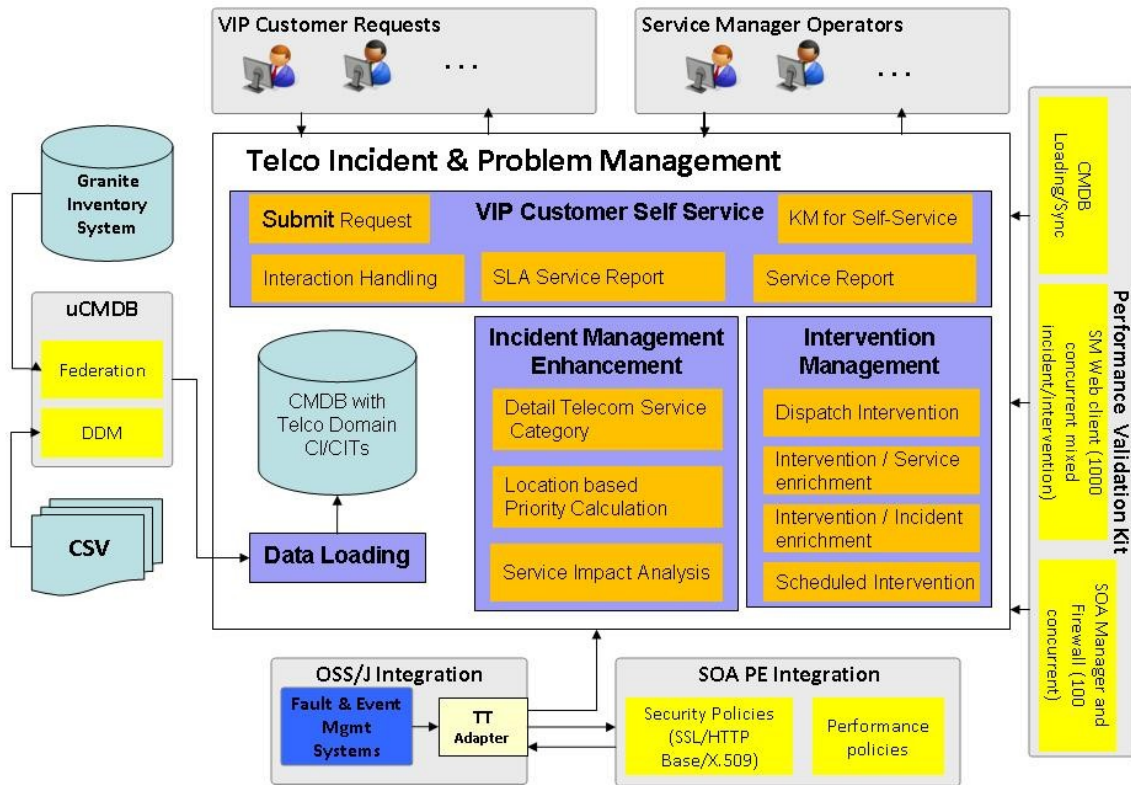
Functionality

HP NGOSS Incident & Problem Management Extension captures Telco and convergence specific best practices for the Telco customers. The functionality implemented by the package is described below.

Functions of Incident & Problem Management Extension

VIP Customer Self Service

From the self service component, VIP customer could do the following actions:

- Search Knowledgebase
- View the VIP customer's relevant requests.
- View the VIP customer's ordered services.
- Submit a request
- Search request

Intervention Management

The Intervention Management process is used to manage simultaneously tasks performed by different support team which can reduce the resolution time for the incident.
The functions of the intervention management process are:

- Create Interventions from an incident
- Assign interventions to the correct work group(s) either manually or automatically for execution
- Track and Manage progress of the intervention
- Track the historic activities of the intervention
- Manage the intervention queue

Incident Management Enhancement

Workflow with TeMIP Integration

If a incident comes from TeMIP alarms, when the incident creates, the following steps should be done by automatically.
1) Look up the related resource CI with MO name.
2) Look up the related services CIs with the resource CIs.
3) Look up the related incidents with the services CIs and resources CIs.
4) Put all these information together and related to the incident as a reference.
When the four steps done, all the relevant information will stored in the incident information. When the Service Desk opens this incident, he can see the relevant services, resources, related incidents.

Telecom Category Definition

It is a Telecom-based hierarchy meant to easily classify the ticket in telecom domains. The three-level hierarchy (category, Domain, and Sub-Domain) creates a "sentence" that clearly and uniquely defines the issue without ambiguity.

Priority Calculation

The priority Calculation can be configured. A parameter "$G.PriorityCalculationWay" is provided on the Format Control "login.DEFAULT" of HP Service Manager7.11 products. And user can define the calculation related to this parameter. Here is the value of the parameter.

Value	Description
1	**Standard priority calculation** Priority = (impact + urgency)/2
2	Priority related to the hierarchy of affected CIs of incident.
3	Remain for user to define.
4	Remain for user to define.
5	Remain for user to define.
…	Remain for user to define.

Configuration Management Enhancement

1) The package provides a set of configuration model of the services, assets and infrastructure and the relationships between service assets and configuration items in Telco fields. These CI types are defined based on M.3100.
2) Modeling the customer, service and resource configuration items and building their relationships.
3) Defines MO and CI relationship in SM to support the integration between SM and TeMIP. When an incident in created from TeMIP, MO information is sent. Through looking up the relationship table, affected CI will be found.

SOA Policy Enforcer V3.10 Integration

The package integrates HP Service Manager7.11 with HP SOA Policy Enforcer V3.10 enables the policy enhancement on the web services which HP Service Manager7.11 opens to external system.

SOA Policy Enforcer V3.10 will act as a web service manager in this integration. The web service consumer (third-party software, e.g. HP TeMIP product) can communicate with SM by calling web services managed on SOA Policy Enforcer to finish following SM incidents operations:

- Create Trouble Ticket
- Update Trouble Ticket
- Re-open Trouble Ticket
- Get Trouble Ticket Information
- Close Trouble Ticket

Generic Data Loading tool

Generic Data Loading tool mainly implement loading data from external inventory system into Service Manager. There will be two ways to load the data from Granite into Service Manager.

1) Using uCMDB as a transit station.
   a) Need to configure federation between uCMDB and Granite
   b) Loading data from uCMDB into Service Manager via Connect IT.
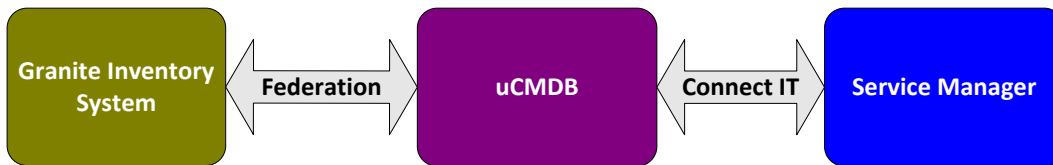
2) Loading data from CSV file into Service Manager

The data models should be according to the Telecom CI types.

Restrictions

The package is implemented based on HP Service Manager7.11/9.20. It will not support the version lower than SM7.11. And the package is based on the Out of Box functions of HP Service Manager7.11 and it will overwrite the existing customization which implemented by the package users. Thus if anyone want to use this package, he'd better install this package on OOB of HP Service Manager7.11/9.20 and then start to get on the customization work.
The package is based on HP Service Manager7.11/9.20, thus the functions which the package includes will be limited by the user's HP Service Manager7.11/9.20 license.

Requirements

Technical specifications

System requirements	
Service Manager Version	The following version of HP Service Manager are supported by the Incident & Problem Management Extension. Service Manager 7.11/9.20 Please contact HP for support for other version of HP Service Manager.
Hardware and Platform	The package is currently supported on x86(Windows), HP-UX and Solaris. The following OS will be supported for the package. ▪ HP-UX 11.31 Itaninum ▪ Windows Server 2003 /Windows Server 2008 (32 bit and 64 bit) ▪ RedHat Linux Enterprise EditionV5 (32 bit and 64 bit) ▪ Novell Linux Enterprise Edition V5 ▪ Solaris 10 Please contact HP for support of other platforms.
Application Server	The following application server is supported for the package: ▪ IBM WebSphere Application Server 6.1 ▪ Tomcat 5.5,6.0(only on JAVA 5) ▪ BEA Weblogic 9.10 ▪ Sun Application Server 8.1 ▪ JBOSS AS 4.2 Please contact HP for support of other application servers.
Software	The following software is required for the Package: ▪ Java SDK1.5 ▪ Oracle 10.2.11.1 Please contact HP for support of other version of JDK or other type of Application Server

The HP Advantage

Increasingly complex and rapidly evolving communications solutions force service providers to deliver even more innovative services to the market while keeping customers loyal and insulated from the complexities behind the services. To achieve this, communications and media service providers need strategic partners who can do more. HP offers targeted and seamless solutions, integrated with partners and delivered quickly and efficiently. HP systems and solutions are open and flexible, empowering customers to customize or create value-added services. Our service capabilities provide the expertise to develop, integrate, test, install and support the most complex service launches. This one-stop shopping approach allows providers to focus on customers-not suppliers.

HP focuses more than 30 years of expertise into a powerful integrated team, the Communications, Media & Entertainment (CME) organization, who along with 500 valued solutions partners, assists the world's top service and equipment providers, as well as media, entertainment and cable operators, in meeting their subscriber needs.

That experience is embodied in the HP Services group, a dedicated team of professionals on the ground in 170 countries worldwide. Building upon a foundation of people, processes and technology, HP Services can manage the complete design, delivery and deployment of critical adaptive infrastructure solutions for today's communications and media services marketplace.

HP delivers solutions, technologies, and services arrayed across network infrastructure, network services, operations and business support, mobile and rich media solutions, and end user access. These innovative capabilities, including the class-leading HP OpenCall and HP Software solution suites, have made HP a major player that is leading change in the communications, media and entertainment industries.

For more information, visit the HP CME web page or contact your local HP sales representative.