

# IPWorks Library Overview

## DESCRIPTION

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# 1 Introduction

This document lists the information available for the IPWorks.

## 1.1 Product Numbers

The product numbers and delivery information is provided in Table 1.

Table 1 Product Numbers

Product Name	Product Number	Library
IPWorks 2.2 R3A	AVA 901 33/3 R3A	EN/LZN 768 0144/3 R3A

## 1.2 Library Distribution

Libraries are distributed as follows:

- Online libraries on CAL Store on the Ericsson Intranet

## 1.3 Library Access

For information on how to access the library, refer to [How to Get Started with Active Library Explorer](#).

## 1.4 Library Structure

The library consists of documents grouped into the following main folders:

- Safety and Environment
- Library Overview
- Product Overview
- Planning
- Data Migration
- Operation and Maintenance
- Emergency
- Interface



## 1.5 Document Types

The documents are grouped into the following three types:

- Descriptive documents contain descriptions of the product on different levels.
- Operational documents give instructions on how to operate or maintain the product.
- Reference documents contain extra information for the user.



## 2 IPWorks Library

This section describes the library contents for the IPWorks.

### 2.1 Safety and Environment

Documents included in this area are listed in Table 2. These documents are intended for personnel who work with Ericsson products.

Table 2 Safety and Environment

Title	Description	Type
Personal Health and Safety Information	Information important for health and safety in the workplace and in the external environment.	Descriptive, Operative
System Safety Information	Information important for product safety.	Descriptive, Operative

### 2.2 Library Overview

Documents included in this area are listed in Table 3. These documents are intended for all personnel involved in work related to any aspect of the product.

Table 3 Library Overview

Title	Description	Type
IPWorks Library Overview	Overview of the CPI library.	Reference
IPWorks Library Changes from 2.1 R2A to 2.2 R3A	Information about library changes from the previous version.	Reference
How to Get Started with Active Library Explorer	Information about how to access the CPI library.	Reference
Glossary of Terms and Acronyms	Explanations of all terms, abbreviations, and acronyms that occur in the library.	Reference
Trademark Information	Includes trademark information used in the library.	Reference
Typographic Conventions	Includes typographic conventions used in the library.	Reference



## 2.3 Product Overview

Documents included in this area are listed in Table 4. These documents are intended as an introduction for all personnel who want an overall understanding of the product or a feature of the product.

Table 4 Product Overview

Title	Description	Type
IPWorks Technical Description	Technical description of the product.	Descriptive
IPWorks FOSS Licenses	List of Free Open Source Software (FOSS) products, including version information and licence texts, that is used in the product.	Descriptive
Virtualized IPWorks Infrastructure Requirements	Describes requirements for the infrastructure resource for IPWorks virtualized applications.	Descriptive

## 2.4 Planning

Documents included in this area are listed in Table 5. These documents are intended for personnel responsible for planning, implementation, and product handling.

Table 5 Planning

Title	Description	Type
IPWorks 2 Characteristics	Specification of performance characteristics and the main parameters affecting those characteristics.	Descriptive
IPWorks Dimensioning Guideline	Information about dimensioning the product, including procedures and background information.	Descriptive
IPWorks 2 Network Impact Report	Information about library changes from the previous version.	Descriptive
IPWorks Network Connectivity Overview	Describes the IPWorks networks and relevant network parameters used for IPWorks deployment.	Descriptive
IPWorks Network Connectivity Overview for KVM	Describes the IPWorks VNF reference networks used for IPWorks deployment for KVM.	Descriptive





Table 5 Planning

Title	Description	Type
IPWorks Site Dependent Parameters	Lists the parameters used in the IPWorks site configuration.	Descriptive
Reference Hardware Requirement for KVM Deployment	Information about the hardware for KVM DL380 Gen9 / Gen10 deployment, reference hardware, and how to order them.	Descriptive

## 2.5 Data Migration

Documents included in this area are listed in Table 6. These documents are intended for personnel planning for system configuration and performing initial configuration.

Table 6 Data Migration

Title	Description	Type
Data Migration from IPWorks HP 15B FD1 CP3 to IPWorks 2	Data Migration user guide from IPWorks 15B FD1 CP3 to IPWorks 2.	Descriptive, Operative
IPWorks Data Migration Description	Describes data migration scripts and the rule files for DNS, ENUM, AAA Diameter, AAA Radius, and DHCP configurations, and database migration.	Descriptive
IPWorks Configuration and Data Migration from HP ProLiant DL380 Gen9 to Gen10	Describes the procedures about how to migrate IPWorks configuration and data from HP ProLiant DL380 Gen9 to HP ProLiant DL380 Gen10	Descriptive, Operative

## 2.6 Operation and Maintenance

Documents within this area are listed in Table 7. These documents are intended as an introduction for personnel involved in any operation and maintenance activity.

Table 7 General Operation and Maintenance Documents

Title	Description	Type
Ericsson Command-Line Interface User Guide	Describes the basic features of the Ericsson Command Line Interface (ECLI) and how to use it.	Descriptive, Operative



## 2.6.1 VNF Life Cycle Management

Documents included in this area are listed in Table 8. These documents are intended for personnel responsible for the operations in the Virtual Network Function Lifecycle Manager (VNF-LCM).

Table 8 VNF Life Cycle Management

Title	Description	Type
IPWorks VNF Life Cycle Management	Describes the system administration tasks performed in the Virtual Network Function Lifecycle Manager (VNF-LCM).	Descriptive, Operative

## 2.6.2 Fault Management

Documents included in this area are listed in Table 9. These documents are intended for personnel performing fault handling, alarm handling, and troubleshooting.

Table 9 Fault Management

Title	Description	Type
Fault Management	Information about fault handling and troubleshooting activities, including procedures and background information.	Descriptive
IPWorks Fault Management Guide for DL380 Platform	Describes the fault management for host OS of DL380 Gen9 on top of which IPWorks VNF is deployed.	Descriptive
IPWorks Trace User Guide	Describes how to perform subscriber tracing using the trace functionality in IPWorks system.	Descriptive, Operative
IPWorks Troubleshooting Guideline	Describes common corrective actions to locate an error.	Descriptive, Operative
Data Collection Guideline for IPWorks	Step-by-step instructions required during data collecting activities.	Descriptive, Operative
<b>SNMP Configuration</b>		
Configure SNMP Master Agent	Step-by-step instructions required to configure an SNMP Master Agent.	Operative
Create SNMPv1 Target	Step-by-step instructions required to create an SNMPv1 target.	Operative
Create SNMPv2C Target	Step-by-step instructions required to create an SNMPv2C target.	Operative
Create SNMPv3 Target	Step-by-step instructions required to create an SNMPv3 target.	Operative



Table 9 Fault Management

Title	Description	Type
Delete SNMP Target	Step-by-step instructions required to delete an SNMP target.	Operative
Disable SNMP Target	Step-by-step instructions required to disable an SNMP target.	Operative
Enable SNMP Target	Step-by-step instructions required to enable an SNMP target.	Operative
Create SNMP View	Step-by-step instructions required to create an SNMP view.	Operative
<b>Alarm Configuration</b>		
Check Alarm Status	Step-by-step instructions required to check the alarm status.	Operative
Change Alarm Type Severity	Step-by-step instructions required to change the alarm type severity.	Operative
Change Heartbeat Interval	Step-by-step instructions required to change the Heartbeat interval.	Operative

Table 10 IPWorks Alarms

Title	Description	Type
IPWorks Alarm List	The list of all alarms and Fault Management events list that the product may receive.	Reference
IPWorks Alarm List for DL380 Host Management	Gives an overview of the IPWorks alarms for G9 and G10 platforms.	Reference



Table 10 IPWorks Alarms

Title	Description	Type
DNS, Server Failed to Start	Step-by-step instructions required to clear the alarm.	Operative
DNS, ASDNS Node Down		
DNS, Query Failure Error		
DNS, Forward Failure Error		
DNS, TPS Exceed Threshold		
Storage Server, MySQL Cluster Node Unreachable		
Storage Server, MySQL Database Unreachable		
Storage Server, Storage Server Unreachable from Server Manager		
Storage Server, The MySQL Replication for Geographic Redundancy failed		
ENUM, Server Failed to Start		
ENUM, Server Lost Connections of DB		
ENUM, Query Failure Error		
ENUM, Total Query Failure Error		
ENUM, CUDB Node Failure		
ENUM, CUDB Site Failure		
ENUM FE Sync, Server Lost Connections of DB		
ENUM FE Sync, All CUDB Connections Failure		
ERH, NP Query Error		
ERH, Toll-free Query Error		
ERH, Total Query Error		
ERH, TPS Exceed Threshold		
ERH, Connection Error		
ERH, CUDB Node Failure		
ERH, CUDB Site Failure		
DHCPv4, Exhausted Lease Pool		
DHCPv4, Failover Network Disconnect		
DHCPv4, Failover Time Skew		
DHCPv4, DHCPv4 Pool Active Lease Cross Threshold		
DHCPv4, DHCPv4 Server Active Lease Cross Threshold		
DHCPv4, Server Failed to Start		
DHCPv4, Server Fatal Shutdown		
DHCPv4, DDNS Retries Failed		
DHCPv4, DDNS Update Failed		
DHCPv4, DHCPv4 Option82 Parsing Failure Cross Threshold		
DHCPv4, DHCPv4 TPS Under Low Threshold		
DHCPv4, DHCPv4 TPS Under Low Threshold		



## 2.6.3 Configuration Management

Documents included in this area are listed in Table 11. These documents are intended for personnel performing configuration and fine-tuning. They are also intended for personnel performing provisioning.

Table 11 Configuration Management

Title	Description	Type
IPWorks Configuration Management	Provides information about configuration activities, including procedures and background information	Descriptive
Advanced Configuration Management IPWorks User Guide	Describes how to execute a quick IPWorks configuration.	Descriptive, Operative
<b>Configuration OPIs and User Guide</b>		
Configure MySQL NDB Cluster	Step-by-step instructions required to configure and management MySQL NDB Cluster.	Operative
Configure DNS and ENUM	Provides the Operating Instructions to configure IPWorks DNS and ENUM.	Operative
Configuring Centralized SS for DNS User Guide	Provides the Operating Instructions to configure and build a centralized DNS cluster.	Descriptive, Operative
Configure Radius AAA	Provides the Operating Instructions to configure IPWorks Radius AAA.	Operative
Configure EPC AAA	Provides the Operating Instructions to configure IPWorks EPC AAA.	Operative
Configure DHCP	Provides the Operating Instructions to configure IPWorks DHCP.	Operative
Configure User Account	Provides the Operating Instructions to configure User Account.	Operative
IPWorks Geographic Redundancy	Provides the Operating Instructions to realize Geographic Redundancy functionality.	Descriptive, Operative
<b>Parameter Description</b>		
IPWorks DNS, ASDNS, ENUM Parameter Description	Describes parameters included in the product.	Descriptive
IPWorks AAA Parameter Description	Describes parameters included in the product.	Descriptive
IPWorks DHCP Parameter Description	Describes parameters included in the product.	Descriptive
<b>Tool User Guide</b>		



Table 11 Configuration Management

Title	Description	Type
Command Line Interface User Guide for IPWorks SS	Information about how to use the CLI to configure SS.	Descriptive, Operative
IPWorks DNS Management User Guide	Describes how to use DNS Management that is the primary graphic user interface of Ericsson IPWorks.	Descriptive, Operative
PDB User Guide	Describes the functionality offered by the Parameter Database (PDB) application.	Descriptive, Operative

### 2.6.3.1 Diameter Management

Documents included in this area are listed in Table 12. These documents are intended for personnel performing configuration and fine-tuning. They are also intended for personnel performing provisioning.

Table 12 Diameter Management

Title	Description	Type
Diameter Stack Configuration Guide	Describes how to configure Diameter Stack.	Operative

### 2.6.3.2 Scaling Management

Documents included in this area are listed in Table 13. These documents are intended for personnel performing scaling-in and scaling-out operations.

Table 13 Scaling Management

Title	Description	Type
IPWorks Scaling Guide for CEE	Describes how to perform the scaling operations for IPWorks on Cloud Execution Environment (CEE).	Descriptive, Operative
IPWorks Scaling Guide for KVM	Describes how to perform the scaling operations for IPWorks on KVM.	Descriptive, Operative

### 2.6.3.3 SS7 Management

Table 14 SS7 Management

Title	Description	Type
Configure SS7 for ENUM Number Portability	Provides the Operating Instructions to configure SS7 for the ENUM Number Portability feature.	Operative



Table 14 SS7 Management

Title	Description	Type
Configure SS7 for AAA	Provides the Operating Instructions to configure SS7 for AAA in deployment scenarios.	Operative
SS7 OPIs (for general reference)		
Configuring SS7, SCTP		Operative
Configuring SS7 Signaling Network, SCCP, M3		
Configuring SS7 Signaling Network, M3 IETF		
Configuring SS7 System Components		
Configuring SS7 TCAP		
Reconfiguring SS7 Network, Creating and Defining GT Routing		
Configuring SS7, INAP		
Configuring SS7, MAP		
Tool User Guide		
Signaling Manager User Guide	Information about how to use Signaling Manager for SS7.	Descriptive, Operative

### 2.6.3.4 System Management

Table 15 System Management

Title	Description	Type
System Management	Provides an overview of the management model and concepts associated with the System Management managed area.	Descriptive
<b>Manage System Attributes</b>		
Check General System Attributes	Provides the Operation Instructions to check the general attributes of the Managed Element (ME).	Operative
<b>Manage XML Model Files</b>		



Table 15 System Management

Title	Description	Type
List Supported XML Model Files	Provides the Operation Instructions to list the XML model files that are supported by the managed element.	Operative
Push XML Model File to Remote File Location	Provides the Operation Instructions to push an XML model file to a remote file location with FTP.	Operative

### 2.6.3.5 File Management

Table 16 File Management

Title	Description	Type
File Management	Provides an overview of the management model and concepts associated with the File Management managed area.	Descriptive
<b>Manage Files</b>		
Fetch File in Logical File System	Provides the Operation Instructions to fetch files from the logical file system.	Operative
Delete File in Logical File System	Provides the Operation Instructions to delete a file in the logical file system within an ECLI session.	Operative
List File Groups and File Information in Logical File System	Provides the Operation Instructions to list file groups and file information in the logical file system using ECLI.	Operative
<b>Manage File Group Policies</b>		
Configure Preventive Maintenance Policy Deleting Files in Logical File System	Provides the Operation Instructions to configure automatic file deletion policy.	Operative
Configure Preventive Maintenance Policy Reporting Alarms for Logical File System	Provides the Operation Instructions to configure alarm reporting policy.	Operative

### 2.6.3.6 Transport Management

Documents included in this area are listed in Table 17. This document is intended for personnel configuring route.





Table 17 Transport Management

Title	Description	Type
Configure Route for IPWorks PL Node	Describes how to configure route for IPWorks PL VM.	Operative
Add eVIP Traffic IP for IPWorks	Describes how to add eVIP IP address in signal network traffic interface.	Operative

## 2.6.4 Performance Management

Documents included in this area are listed in Table 18. These documents are intended for personnel involved in performance monitoring.

Table 18 Performance Management

Title	Description	Type
Performance Management	Provides an overview of the management model and concepts associated with the Performance Management managed area.	Descriptive
IPWorks Measurement List	Provides an overview of the counters for IPWorks.	Reference
IPWorks Measurement List for DL380 Platform	Provides an overview of the counters for IPWorks G9 platform.	Reference
IPWorks Performance Measurements	Detailed information about measurements.	Descriptive
IPWorks Application Counters in CUDB	Provides information about the IPWorks application counters in CUDB (Centralized User Database).	Descriptive, Operative
<b>List PM Information</b>		
List Performance Management Groups and Measurement Types	Provides the Operation Instructions to list the PM groups and measurement types.	Operative
List Performance Management Jobs	Provides the Operation Instructions to list PM jobs.	Operative
<b>Manage Measurement Collection Jobs</b>		
Create Measurement Collection Job	Provides the Operation Instructions to create a measurement collection job.	Operative
Start Measurement Collection Job	Provides the Operation Instructions to start a measurement collection job.	Operative
Stop Measurement Collection Job	Provides the Operation Instructions to stop a measurement collection job.	Operative



Table 18 Performance Management

Title	Description	Type
Delete Measurement Collection Job	Provides the Operation Instructions to delete a measurement collection job.	Operative
<b>Manage Threshold Monitoring Jobs</b>		
Create Threshold Monitoring Job	Provides the Operation Instructions to create a threshold monitoring job.	Operative
Start Threshold Monitoring Job	Provides the Operation Instructions to start a threshold monitoring job.	Operative
Stop Threshold Monitoring Job	Provides the Operation Instructions to stop a threshold monitoring job.	Operative
Delete Threshold Monitoring Job	Provides the Operation Instructions to delete a threshold monitoring job.	Operative

## 2.6.5 Security Management

Documents included in this area are listed in Table 19. These documents are intended for personnel performing security tasks, including supervision and user administration. They are also intended for personnel performing hardening of the product.

Table 19 Security Management

Title	Description	Type
IPWorks Security Management	Describes inherent security features in the IPWorks for interfaces, applications, and protocol.	Descriptive
IPWorks OS Hardening Guide	Describes security management activities for IPWorks system OS.	Descriptive, Operative
IPWorks Host OS Hardening Guide for KVM	Provides step-by-step instructions to harden the SLES 12 SP2 platform used for the IPWorks application.	Descriptive, Operative
IPWorks Application Components Hardening Guide	Describes security management activities for IPWorks application components.	Descriptive, Operative
IPWorks IPTables Service Configuration	Describes security management activities for IPWorks Iptables service.	Descriptive, Operative
IPWorks Authentication User Guide	Describes IPWorks authentication related activities.	Descriptive, Operative
Security Management for ECLI, NETCONF, and SFTP Users	Describes an overview of the management model and concepts associated with the Security Management managed area.	Descriptive



Table 19 Security Management

Title	Description	Type
<b>LDAP Authentication</b>		
View LDAP Configuration	Describes how to view the Lightweight Directory Access Protocol (LDAP) configuration.	Operative
Unlock LDAP Authentication Method	Describes how to unlock the Lightweight Directory Access Protocol (LDAP) authentication method.	Operative
Lock LDAP Authentication Method	Describes how to lock the Lightweight Directory Access Protocol (LDAP) authentication method.	Operative
Change Bind Name and Password for LDAP Authentication	Describes how to change the bind name and password required for password-based simple bind Lightweight Directory Access Protocol (LDAP) authentication.	Operative
Change Certificate Settings for LDAP TLS	Describes how to change the certificate settings for Lightweight Directory Access Protocol (LDAP) Transport Layer Security (TLS).	Operative
Configure Target-Based Access Control	Describes how to change the Target-Based Access Control (TBAC). TBAC is a selective authentication method that determines if a user is allowed to access a specific Managed Element (ME) based on the target type value.	Operative
<b>Local Authorization</b>		
View Roles and Rules	Describes how to view the roles retrieved from the Lightweight Directory Access Protocol (LDAP) server, the rules delivered by the system, and custom rules.	Operative
Unlock Local Authorization Method	Describes how to unlock the local authorization method.	Operative
Lock Local Authorization Method	Describes how to lock the local authorization method.	Operative
Create Custom Role	Describes how to create a custom role.	Operative
Change Custom Role	Describes how to change a custom role.	Operative
Delete Custom Role	Describes how to delete a custom role.	Operative
Create Custom Rule	Describes how to change a custom rule.	Operative



Table 19 Security Management

Title	Description	Type
Change Custom Rule	Describes how to change a custom rule.	Operative
Delete Custom Rule	Describes how to delete a custom rule.	Operative

### 2.6.5.1 Certificate Management

Table 20 Certificate Management

Title	Description	Type
Certificate Management	Provides an overview of the management model and concepts associated with the Certificate Management managed area.	Descriptive
<b>Manage Node Credentials Offline</b>		
Install or Renew Node Credential by CSR	Describes how to install or renew a node credential manually with Certificate Signing Request (CSR), PKCS#10.	Operative
Cancel Offline Enrollment	Describes how to cancel an ongoing offline node credential enrollment that is in RUNNING state.	Operative
Install or Renew Node Credential by PKCS 12	Describes how to manually install a node credential directly from a PKCS#12 file containing both a private key and a certificate, or manually renew a node credential.	Operative
Generate Fingerprint for File	Describes how to generate a fingerprint for a file.	Operative
<b>Manage Node Credentials Online</b>		
Configure Enrollment Authority	Describes how to configure an enrollment authority.	Operative
Configure Enrollment Server Group Together with Enrollment Servers	Describes how to configure an enrollment server group.	Operative
Change Enrollment Server	Describes how to change an enrollment server.	Operative
Install Node Credential Online	Describes how to install a node credential online.	Operative
Renew Node Credential Online	Describes how to renew a node credential online.	Operative
Configure Renewal Mode of Node Credential	Describes how to configure the renewal mode of a node credential.	Operative



Table 20 Certificate Management

Title	Description	Type
Delete Enrollment Server	Describes how to delete an EnrollmentServer from the containing EnrollmentServerGroup Managed Object (MO).	Operative
Delete Enrollment Authority	Describes how to delete an EnrollmentAuthority Managed Object (MO) from the CertM MO.	Operative
Delete Enrollment Server Group	Describes how to delete an enrollment server group.	Operative
<b>Delete Node Credentials Offline or Online</b>		
Delete Node Credential	Describes how to delete a node credential.	Operative
<b>Manage Trusted Certificates</b>		
Install Trusted Certificate	Describes how to install a trusted certificate.	Operative
Create Trust Category	Describes how to create a trust category, which is a group of trusted certificates.	Operative
Change Trust Category	Describes how to change a trust category.	Operative
Delete Trust Category	Describes how to delete a trust category, which is a group of trusted certificates.	Operative
Disable Trusted Certificate	Describes how to disable a trusted certificate.	Operative
Enable Trusted Certificate	Describes how to enable a trusted certificate.	Operative
Delete Trusted Certificate	Describes how to delete a trusted certificate.	Operative

### 2.6.5.2 Local Authentication Management

Table 21 Local Authentication Management

Title	Description	Type
Local Authentication Management	Provides an overview of the management model and concepts associated with the Local Authentication managed area.	Descriptive
<b>Manage O&amp;M User Accounts</b>		

Table 21 Local Authentication Management

Title	Description	Type
Create User Account	Describes how to create a local Operation and Maintenance (O&M) user account.	Operative
Change User Account	Describes how to change attributes in an existing local Operation and Maintenance (O&M) user account.	Operative
Delete User Account	Describes how to delete a local Operation and Maintenance (O&M) user account.	Operative
Create Password Policy	Describes how to create a password policy applicable for local Operation and Maintenance (O&M) user accounts.	Operative
Change Password Policy	Describes how to change attributes in an existing password policy applicable for local Operation and Maintenance (O&M) user accounts.	Operative
Delete Password Policy	Describes how to delete a password policy.	Operative
Change Password Quality Configuration	Describes how to change the password quality settings applicable for local Operation and Maintenance (O&M) user accounts.	Operative
Reset Password for User Account	Describes how the administrator can reset password for a local Operation and Maintenance (O&M) user account.	Operative
Create Account Policy	Describes how to create an account policy applicable for the local Operation and Maintenance (O&M) user accounts.	Operative
Change Account Policy	Describes how to change an account policy applicable for the local Operation and Maintenance (O&M) user accounts.	Operative
Delete Account Policy	Describes how to delete an account policy.	Operative
Lock User Account Administratively	Describes how the administrator can lock a local Operation and Maintenance (O&M) user account.	Operative
Set User Roles for User Account	Describes how to configure roles for a local Operation and Maintenance (O&M) user account. Roles are used to control which parts of the node resources the local user is allowed to access.	Operative



Table 21 Local Authentication Management

Title	Description	Type
Unlock Administrative Lock for User Account	Describes how the administrator can unlock an administratively locked local Operation and Maintenance (O&M) user account.	Operative
Unlock Operational Lock for User Account	Describes how the administrator can unlock a local Operation and Maintenance (O&M) user account that has been locked out by the system.	Operative
Create SSH Public Key	Describes how to create a Secure Shell (SSH) public key managed object for the local Operation and Maintenance (O&M) user account.	Operative
Change SSH Public Key	Describes how to change the Secure Shell (SSH) public key applicable for the local Operation and Maintenance (O&M) user account.	Operative
Delete SSH Public Key	Describes how to delete a Secure Shell (SSH) public key applicable for the local Operation and Maintenance (O&M) user account.	Operative
<b>Manage O&amp;M Administrator Account</b>		
Change Administrator Account	Describes how to change attributes in the specific Administrator account that is used for initial and recovery scenarios when authentication to regular Operation and Maintenance (O&M) accounts is inaccessible.	Operative

## 2.6.6 SW Management

Documents included in this area are listed in Table 22. These documents are intended for personnel performing preventive maintenance of the software and for personnel involved in troubleshooting. They are also intended for personnel performing backup and restoration.

Table 22 Software Management

Title	Description	Type
Software Management	Provides an overview of the management model and concepts associated with the Software Management managed area.	Descriptive



Table 22 Software Management

Title	Description	Type
<b>Software Inventory</b>		
Software Inventory Management	Provides an overview of the management model and concepts associated with the Software Inventory Management managed area.	Descriptive
View Software Information	Provides the Operation Instructions to view the software information.	Operative
<b>Software Upgrade</b>		
Prepare Upgrade Package	Describes the preparation phase of a software upgrade.	Operative
Upgrade Using One-Step Activation	Describes how to perform the execution phase of a software upgrade.	Operative
Delete Upgrade Package	Describes how to delete an upgrade package Managed Object (MO).	Operative
<b>Software Removal</b>		
Delete Inactive Software Version	Describes how to delete an inactive software version from the managed element.	Operative

### 2.6.6.1 Backup and Restore

Table 23 Backup and Restore

Title	Description	Type
Backup and Restore	Provides an overview of the management model and concepts associated with the Backup and Restore managed area.	Descriptive
<b>Basic Backup Operations</b>		
Cancel Backup Operation	Provides the Operation Instructions to cancel a backup operation.	Operative
Create Backup	Provides the Operation Instructions to create a manual backup.	Operative
Restore Backup	Provides the Operation Instructions to restore a backup.	Operative
Delete Backup	Provides the Operation Instructions to delete a backup.	Operative





Table 23 Backup and Restore

Title	Description	Type
List Backups	Provides the Operation Instructions to list the available backups and backup labels.	Operative
View Progress Report	Provides the Operation Instructions to view the ongoing progress report or the result of the last backup operation.	Operative
<b>Schedule Backups</b>		
Schedule Single Backup	Provides the Operation Instructions to schedule a single backup at a specified time.	Operative
Schedule Backups Based on Calendar Event	Provides the Operation Instructions to schedule a regularly occurring backup.	Operative
Schedule Backups Based on Periodic Event	Provides the Operation Instructions to schedule a backup that is to occur at regular intervals.	Operative
<b>Manage Scheduled Backups</b>		
Change Scheduled Backup Name	Provides the Operation Instructions to change scheduled backup name.	Operative
Set Maximum Number of Scheduled Backups	Provides the Operation Instructions to set the maximum number of scheduled backups.	Operative
Delete Scheduled Event	Provides the Operation Instructions to delete a scheduled event.	Operative
Lock Backup Scheduler	Provides the Operation Instructions to lock the backup scheduler.	Operative
Unlock Backup Scheduler	Provides the Operation Instructions to unlock the backup scheduler.	Operative
<b>Manage Manual Backups</b>		
Change Maximum Number of Manual Backups	Provides the Operation Instructions to change the maximum number of manual user backups.	Operative
Enable Automatic Deletion of Manual Backups	Provides the Operation Instructions to enable automatic deletion of manual user backups.	Operative
Disable Automatic Deletion of Manual Backups	Provides the Operation Instructions to disable automatic deletion of manual backups.	Operative
<b>Import and Export Backups</b>		



Table 23 Backup and Restore

Title	Description	Type
Import Backup	Provides the Operation Instructions to import a backup.	Operative
Export Backup	Provides the Operation Instructions to export a backup to an external storage system.	Operative
Change Prefix for Exported Backup Names	Provides the Operation Instructions to change prefix for exported backup names.	Operative
Set Automatic Export of Scheduled Backups	Provides the Operation Instructions to set automatic export of scheduled backups.	Operative

#### 2.6.6.2 License Management

Table 24 License Management

Title	Description	Type
License Management	Provides an overview of the management model and concepts associated with the License Management managed area.	Descriptive
<b>Manage Installation</b>		
Install License Key File	Provides the Operation Instructions to install license key file.	Operative
<b>Manage License Information</b>		
Update License Information	Provides the Operation Instructions to update license information.	Operative
View License Information	Provides the Operation Instructions to view license information.	Operative

#### 2.6.7 Log Management

Documents included in this area are listed in Table 25. These documents are intended for personnel responsible for managing security logs.

Table 25 Log Management

Title	Description	Type
IPWorks Security Log Management Guide	Describes how to configure the security log for IPWorks.	Descriptive, Operative



## 2.6.8 Health Check

Documents included in this area are listed in Table 26. These documents are intended for personnel responsible for health check procedures.

Table 26 Health Check

Title	Description	Type
IPWorks Manual Health Check	Describes how to perform manual health check procedures for IPWorks.	Operative
<b>Auto Health Check</b>		
Health Check Management	Provides an overview of the management model and concepts associated with the Health Check Management (HCM) managed area.	Descriptive
IPWorks Auto Health Check	Describes how to perform auto health check procedures for IPWorks.	Operative
<b>Basic Health Check Operations</b>		
List Health Check Rules	Describes how to list the installed health check rules available on a Managed Element (ME).	Operative
Create Health Check Job	Describes the prerequisites, which must be fulfilled before using the procedure.	Operative
Lock Health Check Rule	Describes how to lock a health check rule.	Operative
Unlock Health Check Rule	Describes how to unlock a health check rule	Operative
Modify Health Check Rule Parameter	Describes how to modify values for parameters used when a health check rule is evaluated.	Operative
Restore Default Value for Health Check Rule Parameter	Describes how to reset default values for parameters used when a health check rule is evaluated	Operative
Execute Health Check Job	Describes how to manually execute a health check job previously created in the Managed Object Model (MOM).	Operative
Execute Health Check Job Providing Export URI	Describes how to manually execute a health check job previously created in the Managed Object Model (MOM) storing the related report file in a local or remote user-defined location.	Operative
List Health Check Jobs	Describes how to list the health check jobs available on IPWorks.	Operative



Table 26 Health Check

Title	Description	Type
Modify Health Check Job To Trigger	Describes how to modify the name of the health check job to be triggered if the job execution detects IPWorks status different from HEALTHY.	Operative
Remove Health Check Job To Trigger	Describes how to remove the name of the health check job to be triggered.	Operative
Delete Health Check Job	Describes how to delete a health check job.	Operative
<b>Schedule Health Check Job</b>		
Schedule Single Health Check Job	Describes how to schedule a health check job at a specified time.	Operative
Schedule Health Check Job Based on Calendar Event	Describes how to schedule a regularly occurring health check job execution during a time slice, using a calendar-based periodic event.	Operative
Schedule Health Check Job Based on Periodic Event	Describes how to schedule a health check job execution to occur at regular intervals during a time slice.	Operative
<b>Manage Scheduled Health Check Jobs</b>		
Delete Scheduled Event	Describes how to delete a scheduled event.	Operative
Lock Health Check Job Scheduler	Describes how to lock a health check job scheduler related to a job.	Operative
Unlock Health Check Job Scheduler	Describes how to unlock a health check job scheduler.	Operative

## 2.6.9 Managed Object Management

Documents included in this area are listed in Table 27.

Table 27 Managed Object Management

Title	Description	Type
Managed Object Model User Guide	Describes the MOM, how to interpret its presentation within CPI, and how to use the MOM when interacting with a MIB.	Descriptive, Operative
Managed Object Model (MOM)	Describes all managed object classes and attributes.	Descriptive



## 2.7 Emergency

Documents included in this area are listed in Table 28. These documents are intended for personnel authorized to perform an emergency recovery.

Table 28 Emergency

Title	Description	Type
Emergency Recovery Procedure for IPWorks	Information about emergency recovery activities, including procedures and background information.	Descriptive, Operative

## 2.8 Interface

Documents included in this area are shown are listed in Table 29. These documents are intended for personnel needing to understand the logical entity, including interfaces and protocols.

Table 29 Interface

Title	Description	Type
IPWorks ENUM Server ENUM Clients Interface	Describes the interface between the IPWorks ENUM server and ENUM clients.	Descriptive, Reference
IPWorks ENUM LDAP CUDB Interface	Describes the interface between the IPWorks ENUM FE and the Centralized User Database(CUDB).	Descriptive, Reference
IPWorks ENUM SOAP CUDB Interface	Describes the SOAP interface between the CUDB and the IPWorks ENUM FE.	Descriptive, Reference
IPWorks ERH and NPDB Interface-LDAP	Describes the interface between the IPWorks ERH and NPDB.	Descriptive, Reference
IPWorks SCF INAP Interface	Describes the INAP between IPWorks and SCF node for NP information retrieval.	Descriptive, Reference
IPWorks MNP-SRF MAP Interface	Describes the MAP v3 protocol used between IPWorks and MNP SRF node for MNP information retrieval.	Descriptive, Reference
IPWorks SCP SS7 Interface	Describes the interface between the IPWorks and the external SS7 nodes for LNP and Toll Free functions.	Descriptive, Reference
IPWorks EDA CLI Interface	Describes the interface between the IPWorks and the EMA by using the Command-Line Interface (CLI) and specifies the behavior of the IPWorks CLI for EMA.	Descriptive, Reference



Table 29 Interface

Title	Description	Type
IPWorks 3GPP AAA Server-PDG Wm Interface	Describes the Wm reference point between IPWorks AAA server and the PDG node.	Descriptive, Reference
IPWorks 3GPP AAA Server-WLAN Access Network Wa Interface	Describes the Wa reference point between IPWorks AAA server and the WLAN Access Network.	Descriptive, Reference
IPWorks 3GPP AAA Server-Non-3GPP Access GW STa Interface	Describes the STa interface between the trusted non-3GPP IP access network and the 3GPP AAA Server.	Descriptive, Reference
IPWorks 3GPP AAA Server-HSS SWx Interface	Describes the SWx interface between the 3GPP AAA server and the HSS.	Descriptive, Reference
IPWorks 3GPP AAA Server-PDN GW S6b Interface	Describes the S6b interface between the PDN GW and the 3GPP AAA server in EPC network.	Descriptive, Reference
IPWorks AAA LDAP CUDB Interface	Describes the interface between Authentication, Authorization, Accounting services (AAA) and the Centralized User Database (CUDB).	Descriptive, Reference
IPWorks 3GPP AAA Server-ePDG SWm and SWm+ Interface	Describes the SWm/SWm+ interface between the IPWorks 3GPP AAA Server and ePDG.	Descriptive, Reference
IPWorks 3GPP AAA Server-HLR J' Interface	Describes the J' interface between the IPWorks AAA Server node and the Home Location Register (HLR) node.	Descriptive, Reference
IPWorks 3GPP AAA Server Geography Data Description	Describes IPWorks AAA Server Geography data.	Descriptive, Reference
Radius STaPlus Interface between IPWorks AAA Server and Non-3GPP Access GW	Describes the STa Plus interface between the IPWorks AAA Server node and non-3GPP Access GW.	Descriptive, Reference
IPWorks 3GPP AAA Server-HLR D'/Gr' Interface	Describes IPWorks 3GPP AAA Server-HLR D'/Gr' Interface.	Descriptive, Reference
IPWorks 3GPP AAA Server-EIR S13 Interface	Describes the S13 interface between the 3GPP AAA server and the EIR.	Descriptive, Reference
IPWorks CLF NACF a2 Interface	Describes the protocol used between the CLF and NACF.	Descriptive, Reference
IPWorks AAA Server-AAA Clients Gi Interface	Describes IPWorks Server-AAA Clients Gi Interface.	Descriptive, Reference



Table 29 Interface

Title	Description	Type
IPWorks 3GPP AAA Server-CA OCSP Interface	Describes the OCSP interface between the 3GPP AAA server and ECAS (Ericsson Certificate Administration Server).	Descriptive, Reference
IPWorks 3GPP AAA Server-HLR D' Interface	Describes the D' interface between the IPWorks AAA server node and the Home Location Register (HLR) node.	Descriptive, Reference
IPWorks 3GPP AAA Server-SES SWm' Interface	Describes the SWm' interface between the IPWorks 3GPP AAA Server and SES.	Descriptive, Reference
Ericsson Command-Line Interface	Describes the ECLI, including descriptions of all commands, key combinations, error messages, character support, and examples.	Descriptive, Reference
Ericsson NETCONF Interface	Describes the Ericsson Network Configuration (NETCONF) interface.	Descriptive, Reference
LDAP-Based Authentication and Authorization Interface	Describes the LDAP client capabilities, LDAP configuration supported by the ME and required in the LDAP server for interworking, and the ME LDAP lookup behavior.	Descriptive, Reference
Performance Management Report File Format	Describes the 3GPP® compliant Performance Management (PM) XML file format supported in the PM interfaces.	Descriptive, Reference
AlarmListRebuilt	Describes the AlarmListRebuilt event and how to handle it.	Descriptive, Operative
eVIP, Configuration Fault	Describes the eVIP, Configuration Fault event.	Descriptive, Operative
HeartBeat	Describes the HeartBeat event and how to handle it.	Descriptive, Operative
Ericsson NETCONF Browser User Guide	Describes how to use the Ericsson NETCONF Browser to interact with live node configurations.	Descriptive, Operative
Ericsson NETCONF Browser Technical Product Description	Describes the Ericsson NETCONF Browser (ENB).	Descriptive