# Oracle® Banking Cash Management Services Installation Guide





Oracle Banking Cash Management Services Installation Guide, Release 14.7.2.0.0

F88380-01

Copyright © 2020, 2023, Oracle and/or its affiliates.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software, software documentation, data (as defined in the Federal Acquisition Regulation), or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software," "commercial computer software documentation," or "limited rights data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of i) Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs), ii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract. The terms governing the U.S. Government's use of Oracle cloud services are defined by the applicable contract for such services. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle®, Java, MySQL and NetSuite are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Inside are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Epyc, and the AMD logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

# Contents

1	Database Setup
2	Product Installation using Installer
3	Domain and Cluster Configuration
4	Data Source Creation
5	Deployments
6	Restarts and Refresh
7	Logging Area
	Index



### **Preface**

- Purpose
- Audience
- · Documentation Accessibility
- · Diversity and Inclusion
- Related Resources
- Conventions
- Acronyms and Abbreviations

### Purpose

This guide would help you to install the Oracle Banking Cash Management services on designated environment. It is assumed that all the prior setup is already done related with WebLogic installation, WebLogic managed server creation and Oracle Database installation. It is recommended to use dedicated managed server for each of the Oracle Banking Cash Management services.

### **Audience**

This guide is intended for WebLogic admin or ops-web team who are responsible for installing the OFSS banking products.

## **Documentation Accessibility**

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

#### **Access to Oracle Support**

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit <a href="http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info">http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs</a> if you are hearing impaired.

## **Diversity and Inclusion**

Oracle is fully committed to diversity and inclusion. Oracle respects and values having a diverse workforce that increases thought leadership and innovation. As part of our initiative to build a more inclusive culture that positively impacts our employees, customers, and partners, we are working to remove insensitive terms from our products and documentation. We are also mindful of the necessity to maintain compatibility with our customers' existing technologies and the need to ensure continuity of service as Oracle's offerings and industry standards evolve. Because of



these technical constraints, our effort to remove insensitive terms is ongoing and will take time and external cooperation.

### **Related Resources**

The related documents are as follows:

- Oracle Banking Cash Management Pre-Installation Guide
- Configuration and Deployment Guide
- Oracle Banking Cash Management Environment Variable Setup Guide
- Oracle Banking Cash Management User Interface Installation Guide

### Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

# **Acronyms and Abbreviations**

The list of the acronyms and abbreviations used in this guide are as follows:

Table Acronyms and Abbreviations

Abbreviation	Description
JDK	Java Development Kit
OSDC	Oracle Software Delivery Cloud
SMS	Security Management System



# **Database Setup**

This topic describes the database setup for Oracle Banking Cash Management Installation.

#### **Prerequisite**

Before you proceed with the document, ensure Schema's are being created. It is recommended to have different schema for each application.

#### **Database Schema Creation**

Create the following database schema's. These schema names are recommended, but not mandatory.

- PLATO
- PLATO\_UI\_CONFIG
- PLATO\_SECURITY
- PLATO\_FEED
- PLATO REPORT SERVICE
- PLATORULE
- PLATO\_BATCH
- PLATO\_PASSWORD
- COMMON\_CORE
- PLATOALERTS
- PLATO\_TRANSPORT
- PLATOORCH
- SMSCD0
- OBSCFCM\_ACCOUNTING
- OBSCFCM\_ALERTS
- OBSCF BATCH
- OBSCFCM CHARGES
- OBSCFCM\_CORE\_SERVICES
- OBSCFCM\_FILTER
- OBSCFCM\_INSTRUMENTS
- OBSCFCM\_RECON
- OBSCFCM\_REPORT
- OBSCFCM\_WORKFLOWS\_CONDUCTOR
- OBSCFCM\_MASTER\_MAINTENANCE
- OBSCFCM\_FILE\_PROCESSING



- OBCM\_CASHFLOW\_FORECASTING
- OBCM\_CASHFLOW\_PROJECTION
- OBCM\_CASHFLOW\_PREDICTION
- OBCM\_COLLECTIONS\_MASTERS
- OBCM\_COLLECTIONS
- OBCM\_REPORT\_SERVICES

#### Note:

For creating database schemas, refer to **Database Schema Creation** section in **Configuration and Deployment Guide**.

#### **View Creation Grants (Oracle Banking Cash Management Cashflow Prediction)**

The following grants are provided for Oracle Banking Cash Management Cashflow Prediction:

- grant create mining model to OBCM\_CASHFLOW\_PREDICTION;
- grant create any mining model to OBCM\_CASHFLOW\_PREDICTION;
- grant alter any mining model to OBCM\_CASHFLOW\_PREDICTION;
- grant drop any mining model to OBCM\_CASHFLOW\_PREDICTION;
- grant select any mining model to OBCM\_CASHFLOW\_PREDICTION;
- grant comment any mining model to OBCM\_CASHFLOW\_PREDICTION;
- grant execute on DBMS\_DATA\_MINING to OBCM\_CASHFLOW\_PREDICTION;
- grant create view to OBCM\_CASHFLOW\_PREDICTION;
- grant create table to OBCM\_CASHFLOW\_PREDICTION;
- grant drop table to OBCM\_CASHFLOW\_PREDICTION;
- grant create job to OBCM\_CASHFLOW\_PREDICTION;
- ALTER USER OBCM\_CASHFLOW\_PREDICTION ENABLE EDITIONS;



# Product Installation using Installer

This topic describes the systematic information to install Oracle Banking Cash Management application using Installer.

#### **Prerequisite**

Before proceeding with installation setup, make sure that the database installation is completed and required schemas are created.

#### **Installer Path**

The following table provides the path of the installer in OSDC Package.

Application	Archive Name	OSDC Path
Oracle Banking Microservices Architecture	obma.zip	OBCM_14.7.0.1.0/Installer
Oracle Banking Cash Management	obcm.zip	
Oracle Banking Supply Chain Finance Cash Management	obscfcm.zip	



To install the application using installer, refer to **Oracle Banking Microservices Architecture Installer Guide** 



# Domain and Cluster Configuration

This topic describes the domain and cluster configuration for Oracle Banking Cash Management.

#### Pre-requisite

- Oracle Banking Microservices Architecture, SMS and Common core deployments are up and running. (Required)
- · Machine should have Java JDK installed.
- Oracle Fusion Middleware has to be installed on the machine.



For the exact version to be installed, refer to the **Tech Stack** section in **Release Notes** 

#### **Domain Creation and Configuration**

It is recommended to have different managed server in one domain for each application. For creating domain and cluster configuration, refer to **Create Domain and Cluster Configuration** section in **Configuration and Deployment Guide** 



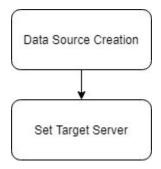
### **Data Source Creation**

This topic describes about the data source creation for Oracle Banking Cash Management Installation.

#### **Data Source Creation in WebLogic**

Database and application setup for Oracle Banking Cash Management services has to be performed prior to deployment setup. The data sources for the respective micro-services must be created first before the application deployment. Each of the data source target to their corresponding servers on which the application will be deployed. The following sections explain the list of data sources required to be created for Oracle Banking Cash Management services and the steps to configure them in the server.

Figure 4-1 Data Source Creation



#### **Data sources List**

Database Connection Pool size to be defined - Oracle Banking Cash Management services pool configuration should be consistent with plato services.

The following list of the data sources has to be created on each domain before deployment of the applications onto the managed servers.

Table 4-1 Data Sources List

Application	Data Source Name	Mapped Database Schema	Data source JNDI
obscfcm-account- maintenance	OBSCFCM_ACCOUNTI NG	OBSCFCM_ACCOUNTI NG	jdbc/ OBSCFCM_ACCO UNTING
obscfcm-alerts-services	OBSCFCM_ALERTS	OBSCFCM_ALERTS	jdbc/ OBSCFCM_ALER TS
obscfcm-eod-batch	PLATO_BATCH	PLATO_BATCH	jdbc/EODBATCH
	OBSCF_BATCH	OBSCF_BATCH	jdbc/EOD

Table 4-1 (Cont.) Data Sources List

Application	Data Source Name	Mapped Database Schema	Data source JNDI
	PLATO_BATCH	PLATO_BATCH	jdbc/PLATOBATCH
obscfcm-auto-recon-batch	PLATO_BATCH	PLATO_BATCH	jdbc/ AUTORECONBAT CH
obscfcm-auto-recon-batch	PLATO_BATCH	PLATO_BATCH	jdbc/PLATOBATCH
obscfcm-charges-services	OBSCFCM_CHARGES	OBSCFCM_CHARGES	jdbc/ OBSCFCM_CHAR GES
obscfcm-core-services	OBSCFCM_CORE_SE RVICES	OBSCFCM_CORE_SE RVICES	jdbc/ OBSCFCM_CORE _SERVICES
obscfcm-filter-services	OBSCFCM_FILTER	OBSCFCM_FILTER	jdbc/ OBSCFCM_FILTE R
obscfcm-instruments- receivables-services	OBSCFCM_INSTRUME NTS	OBSCFCM_INSTRUME NTS	jdbc/ OBSCFCM_INST RUMENTS
obscfcm-manual-recon- services	OBSCFCM_RECON	OBSCFCM_RECON	jdbc/ OBSCFCM_RECO N
obscfcm-report-services	OBSCFCM_REPORT	OBSCFCM_REPORT	jdbc/ OBSCFCM_REPO RT
obscfcm-workflow- management-services	OBSCFCM_WORKFLO WS_CONDUCTOR	OBSCFCM_WORKFLO WS_CONDUCTOR	jdbc/ OBSCFCM_WOR KFLOWS_CONDU CTOR
obscfcm- mastermaintenance-services	OBSCFCM_MAINTENA NCE	OBSCFCM_MAINTENA NCE	jdbc/ OBSCFCM_MAIN TENANCE
obcm-cashflow-forecasting- services	OBCM_CASHFLOW_F ORCAST	OBCM_CASHFLOW_F ORCAST	jdbc/ OBCM_CASHFLO W_FORCAST
obcm-cashflow-projection- services	OBCM_CASHFLOW_P ROJECTION	OBCM_CASHFLOW_P ROJECTION	jdbc/ OBCM_CASHFLO W_PROJECTION
obscfcm-batch-jobs	OBSCFCM-BATCH- JOBS	OBSCFCM-BATCH- JOBS	jdbc/OBSCFCM- BATCH-JOBS
obcm-collections-transaction- services	OBCM_COLLECTIONS	OBCM_COLLECTIONS	jdbc/ OBCM_COLLECTI ONS
obcm-report-services	OBCM_REPORT	OBCM_REPORT	jdbc/ OBCM_REPORT
obcm-collections- maintenance-services	OBCM_COLLECTION_ MAINT	OBCM_COLLECTION_ MAINT	Jdbc/ OBCM_COLLECTI ON_MAINT
obcm-cashflow-prediction- services	OBCM_CASHFLOW_P REDICTION	OBCM_CASHFLOW_P REDICTION	jdbc/ OBCM_CASHFLO W_PREDICTION



Table 4-1 (Cont.) Data Sources List

Application	Data Source Name	Mapped Database Schema	Data source JNDI
To be mapped with all	PLATO	PLATO	jdbc/PLATO
managed servers	PLATO_UI_CONFIG	PLATO_UI_CONFIG	jdbc/ PLATO_UI_CONFI G
	SMS	SMSCD0	jdbc/sms
	CMNCORE	COMMON_CORE	jdbc/CMNCORE
	PLATO_FEED	PLATO_FEED	jdbc/PLATOFEED
obcm-day0-service	OBCM_CASHFLOW_F ORCAST	OBCM_CASHFLOW_F ORCAST	jdbc/ OBCM_CASHFLO W_FORCAST
	OBCM_COLLECTION_ MAINT	OBCM_COLLECTION_ MAINT	jdbc/ OBCM_COLLECTI ON_MAINT
	OBSCFCM_MAINTENA NCE	OBSCFCM_MAINTENA NCE	jdbc/ OBSCFCM_MAIN TENANCE
	PLATO_BATCH	PLATO_BATCH	jdbc/PLATOBATCH
obscfcm-day0-service	OBSCFCM_ACCOUNTI NG	OBSCFCM_ACCOUNTI NG	jdbc/ OBSCFCM_ACCO UNTING
	OBSCFCM_FILTER	OBSCFCM_FILTER	jdbc/ OBSCFCM_FILTE R
	OBSCFCM_INSTRUME NTS	OBSCFCM_INSTRUME NTS	jdbc/ OBSCFCM_INST RUMENTS
	OBSCFCM_RECON	OBSCFCM_RECON	jdbc/ OBSCFCM_RECO N
	PLATO_BATCH	PLATO_BATCH	jdbc/PLATOBATCH
	PLATO_SECURITY	PLATO_SECURITY	jdbc/ PLATOSECURITY
	OBSCFCM_WORKFLO WS_CONDUCTOR	OBSCFCM_WORKFLO WS_CONDUCTOR	jdbc/ OBSCFCM_WOR KFLOWS_CONDU CTOR
	OBSCFCM_REPORT	OBSCFCM_REPORT	jdbc/ OBSCFCM_REPO RT
	OBSCFCM_MAINTENA NCE	OBSCFCM_MAINTENA NCE	jdbc/ OBSCFCM_MAIN TENANCE





For creating data source, refer to the **Create Datasource** section in **Configuration and Deployment Guide**.



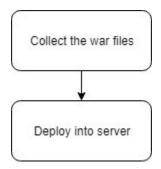
# **Deployments**

This topic describes about the deployments for Oracle Banking Cash Management Installation.

#### **Prerequisite**

The database setup and data sources creation have to be performed prior to the application deployment stage. Each of the services corresponds to a specific war file that needs to be deployed into the server. The following sections explain the list of war files of the Oracle Banking Cash Management service and the steps to deploy them into the server.

Figure 5-1 Deployments



- For any issues with fly configuration setup, refer to High Availability Setup Guide.
- For Oracle Banking Cash Management environment variables setup, refer to Environment Variable Setup Guide.
- If 'obscf-eod-batch' is already deployed, bring it down and deploy 'obscfcm-eod-batch' provided in the deployment list.

#### **Deployments List**

The following table provides the details of deployments required on each Server for the Plato application to run. Deploy one after other in the same given order.



INFRA Pre-requisites should be available before proceeding with the Application deployment process.

#### Application Startup and Deployment Sequence for new installation or Upgrades

 PLATO Domain <All Plato Infrastructure Services & Plato Services should be deployed as per respective installation document>

- Common Core <All SMS, Common Core and Mid-Office Common Core services should be deployed as per respective installation document>
- Domain services
  - All the services in any order except for the below mentioned services which are to be deployed at the end in the order stated in the below list.
    - \* obscfcm-master-maintenance
    - \* obcm-day0-service
    - \* obscfcm-day0-service
- The recommended list of managed server names and the application distribution on the targets are listed below. But not mandatory, provided the managed server is configured as per the sizing recommendations during the implementation phase.
- It is recommended to deploy obcm-collections-maintenance-services first and then deploy obcm-collections-transaction-services war while deploying Oracle Banking Cash Management Services.



For the exact version and release numbers, refer to the OSDC file available as a part of the release.

**Table 5-1 Deployments List** 

Application	Archive name	OSDC path	Targets
obcm-cashflow- forecasting-services	obcm-cashflow- forecasting-services- {version}.war	OBCM_{release} \OBCM_SERVICES\obcm- cashflow-forecasting- services-{version} \ARCHIVE	obcm_ms_1
obcm-cashflow- projection-services	obcm-cashflow-projection- services-{version}.war	OBCM_{release} \OBCM_SERVICES\obcm- cashflow-projection- services-{version} \ARCHIVE	obcm_ms_1
obcm-cashflow- prediction-services	obcm-cashflow-prediction- services-{version}.war	OBCM_{release} \OBCM_SERVICES\obcm- cashflow- prediction- services-{version} \ARCHIVE	obcm_ms_1
obcm-collections- maintenance-services	obcm-collections- maintenance-services- {version}.war	OBCM_{release} \OBCM_SERVICES\obcm- collections-maintenance- services-{version} \ARCHIVE	obcm_ms_2
obcm-collections- transaction-services	obcm-collections- transaction-services- {version}.war	OBCM_{release} \OBCM_SERVICES\obcm- collections-transaction- services-{version} \ARCHIVE	obcm_ms_1



Table 5-1 (Cont.) Deployments List

Application	Archive name	OSDC path	Targets
obcm-report-services	obcm-report-services- {version}.war	OBCM_{release} \OBCM_SERVICES\obcm- report-services-{version} \ARCHIVE	obcm_ms_2
obscfcm-account- maintenance-services	obscfcm-account- maintenance-services- {version}.war	OBCM_{release} \OBCM_SERVICES\obscfc m-account-maintenance- services-{version} \ARCHIVE	obscfcm_ms _1
obscfcm-alerts- services	obscfcm-alerts-services- {version}.war	OBCM_{release} \OBCM_SERVICES\obscfc m-alerts-services-{version} \ARCHIVE	obscfcm_ms _1
obscfcm-batch-jobs	obscfcm-batch-jobs- {version}.war	OBCM_{release} \OBCM_SERVICES\obscfc m-batch-jobs-{version} \ARCHIVE	obscfcm_ms _1
obscfcm-chatbot- services	obscfcm-chatbot-services- {version}.war	OBCM_{release} \OBCM_SERVICES\obscfc m-chatbot-services- {version}\ARCHIVE	obscfcm_ms _1
obscfcm-eod-batch	obscfcm-eod-batch- {version}.war	OBCM_{release} \OBCM_SERVICES\obscfc m-eod-batch-{version} \ARCHIVE	obscfcm_ms _1
obscfcm-auto-recon- batch	obscfcm-auto-recon-batch- {version}.war	OBCM_{release} \OBCM_SERVICES\obscfa uto-recon-batch-{version} \ARCHIVE	obscfcm_ms _2
obscfcm-charges- services	obscfcm-charges-services- {version}.war	OBCM_{release} \OBCM_SERVICE\obscfc m-charges-services- {version}\ARCHIVE	obscfcm_ms _2
obscfcm-core- services	obscfcm-coreservices- {version}.war	OBCM_{release} \OBCM_SERVICE\obscfc m-core-services-{version} \ARCHIVE	obscfcm_ms _2
obscfcm-filter-services	obscfcm-filter-services - {version}.war	OBCM_{release} \OBCM_SERVICES\obscfc m-filter-services-{version} \ARCHIVE	obscfcm_ms _2
obscfcm-instruments- receivables-services	obscfcm-instruments- receivables-services- {version}.war	OBCM_{release} \OBCM_SERVICES\obscfc m-instruments-receivables- services-{version} \ARCHIVE	obscfcm_ms _2
obscfcm-manual- reconservices	obscfcm-manual-recon- services{version}.war	OBCM_{release} \OBCM_SERVICES\obscfc m-manual-recon-services- {version}\ARCHIVE	obscfcm_ms _3



Table 5-1 (Cont.) Deployments List

Application	Archive name	OSDC path	Targets
obscfcm-report- services	obscfcm-report-services- {version}.war	OBCM_{release} \OBCM_SERVICES\obscfc m-report-services-{version} \ARCHIVE	obscfcm_ms _3
obscfcm-workflow- management-services	obscfcm-workflow- management-services- {version}.war	OBCM_{release} \OBCM_SERVICES\obscfc m-workflow-management- services-{version} \ARCHIVE	obscfcm_ms _3
obscfcm-master- maintenance-services	obscfcm-master- maintenance-services- {version}.war	OBCM_{release} \OBCM_SERVICES\obscfc m-master-maintenance- services-{version} \ARCHIVE	obscfcm_ms _3
obcm-day0-service	obcm-day0-service- {version}.war	OBCM_{release} \OBCM_SERVICES\obcm- day0-service-{version} \ARCHIVE	obcm_DAY0
obscfcm-day0-service	obscfcm-day0-service- {version}.war	OBCM_{release} \OBCM_SERVICES\obscfc m-day0-service-{version} \ARCHIVE	obscfcm_DA Y0



To deploy application, refer to  $\bf Deploy\ Application$  section in  $\bf Configuration$  and  $\bf Deployment\ Guide.$ 



### Restarts and Refresh

This topic describes the procedure to restart and refresh the servers.

Once everything is deployed, the managed servers. And for each application call path "/ refresh" for refreshing the configuration properties.



To restart the server, refer to **Restart Server** section in **Configuration and Deployment Guide**.

#### **Restart Order**

- Sequence in case of any configuration changes in the plato schema's -> properties table or server arguments (eg: port or host)
  - Restart the plato-config-service and plato-discovery-service.
  - Restart the impacted service
- Sequence in case of any configuration changes in the plato-ui-config schema (eg: port or host)
  - Restart plato-ui-config-service

#### **Caching Impact**

The following services use caching and if direct changes are done in database, then service needs to be bounced else cache eviction will happen in 2 hours or configured value in the server start up params:

- Obscfcm-master-maintenance
- 2. Obscfcm-filter-service
- 3. Obscfcm-manual-recon-service
- 4. Obscfcm-core-service

# Logging Area

This topic describes about the logging area of Plato applications in WebLogic server.

Plato Application writes logs in the below area of the server:

<WEBLOGIC\_DOMAIN\_CONFIG\_AREA>/ logs/plato-api-gateway.log

Let's assume a domain has been created cm\_domain in the following area of the server:

/scratch/oracle/middleware/user projects/domains/platoinfra domain

Logging area for Plato would be /scratch/oracle/middleware/user\_projects/domains/
cm domain/logs.



# Index

D	
Data Source Creation, 4-1	– P
Database Setup, 1-1 Deployments, 5-1	Product Installation using Installer, 2-1
Domain and Cluster Configuration, 3-1	R
L	Restarts and Refresh, 6-1
Logging Area 7-1	_

