

**Oracle® Communications  
Offline Mediation Controller**

Licensing Information User Manual

Release 12.0

**E91428-03**

September 2019

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## Introduction

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## Licensing Information

Product	Subproduct	Licensing Description
Oracle Communications Offline Mediation Controller	Oracle Communications Offline Mediation Controller	<p>Oracle Communications Offline Mediation Controller provides a flexible and scalable architecture for the collection, aggregation, enhancement, and distribution of network data. It can accommodate multiple collection requirements and distribute the data to billing systems.</p> <p>Oracle Communications Offline Mediation Controller consists of several components that work together to process network data. These components are built using the cartridge framework. There are three major types of cartridges or nodes in Oracle Communications Offline Mediation Controller:</p> <ul style="list-style-type: none"> <li>• Collection Cartridge (CC)</li> <li>• Processor Cartridges: Enhancement Processor (EP) Cartridge and Aggregation Processor (AP) Cartridge</li> <li>• Distribution Cartridge (DC)</li> </ul> <p>A Collection Cartridge (CC) is the entry point for data coming into the Offline Mediation Controller system. A CC is responsible for converting this data to a common format (NAR – Network Accounting Record) for use within the system.</p> <p>A Processor Cartridge (EP and AP) performs some additional functionality on the data in the NAR, such as combining the values of one or more fields into a single field, or adding/removing fields or records based on a particular value or condition.</p> <p>A Distribution Cartridge (DC) is responsible for converting the data in NAR format into some output format, such as a file or database, for use by other applications like Oracle Communications Billing and Revenue Management (BRM) pipeline batch application. Oracle Communications Offline Mediation Controller provides an OOB DC that writes an output file in ASCII, ASN.1, or XML formats.</p> <p>Cartridge Development Kit (CDK):</p> <ul style="list-style-type: none"> <li>• Used to create new cartridges and consists of NPL Reference Guide and CDK Developer's Guide</li> <li>• Customer can also create a custom rule file for an existing Cartridge Kit cartridge</li> </ul> <p><b>Included:</b></p> <p>Oracle Communications Offline Mediation Controller includes Elastic Charging Engine Cartridge Bundle to handle normalized usage record files from the network, process and send them to Elastic Charging Engine (ECE) for offline charging. Elastic Charging Engine bundle includes Flexible ASCII Collection, Oracle CDR Format Collection, Record Enhancement Cartridge for Charging, Duplicate Check and Elastic Charging Engine Distribution Cartridge.</p> <p>Oracle Communications Offline Mediation Controller includes Suspense Management Cartridge Bundle which contains NAR Collection Cartridge, Suspense Distribution Cartridge, Recycle Collection Cartridge and Recycle Processor Cartridge to manage error/suspended records. For this bundle to work it requires licensing of Oracle Communications Suspense Manager.</p> <p>Oracle Communications Offline Mediation Controller includes Duplicate Check cartridge to optimally manage duplicate usage records from the network.</p> <p><b>Prerequisites:</b></p> <p>Oracle Communications Offline Mediation Controller requires</p>

Product	Subproduct	Licensing Description
Oracle Communications Offline Mediation Controller Cartridges: Bundles	Oracle Communications Offline Mediation Controller Cartridge – IMS CGF Bundle	<p>licensing of Directory Services Plus OR Identity and Access Management Suite Plus for Oracle Applications.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge – IMS CGF Bundle is intended to provide all the basic functionality required to collect event records from the IMS core network and create billable CDRs.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge – IMS CGF Bundle includes:</p> <ul style="list-style-type: none"> <li>• IMS CGF Diameter Collection Cartridge</li> <li>• IMS CGF Diameter Parser EP Cartridge</li> <li>• IMS CGF Session Sequencing EP Cartridge</li> <li>• IMS CGF AVP Mapper EP Cartridge</li> <li>• IMS CGF Session Aggregation AP Cartridge</li> <li>• IMS CGF ASN.1 Distribution Cartridge</li> </ul> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
	Oracle Communications Offline Mediation Controller Cartridge – Packet CGF Bundle	<p>The Oracle Communications Offline Mediation Controller Cartridge – Packet CGF Bundle is required for all new installations of Oracle Communications Offline Mediation Controller to support a GPRS or UMTS packet core network (GGSN and SGSN).</p> <p>The Oracle Communications Offline Mediation Controller Cartridge – Packet CGF Bundle provides the functionality required to support collection and distribution of billing records according to the 3GPP 32.015 specification for the Charging Gateway Function.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge – Packet CGF Bundle includes:</p> <p>The following Collection, Processing, and Distribution Cartridges for Packet CGF:</p> <ul style="list-style-type: none"> <li>• GGSN/SGSN 3GPP 32.015/32.251 GTP/GTP' Collection Cartridge</li> <li>• Session Sequencing Enhancement Processor Cartridge (performs duplicate record removal and re-sequencing of CDRs that arrive out of sequence)</li> <li>• Duplicate Check Cartridge (performs duplicate record check and removal)</li> <li>• Oracle Communications Offline Mediation Controller Cartridge - 3GPP 32.015/32.251/32.298 ASN.1 Distribution</li> <li>• Oracle Communications Offline Mediation Controller Cartridge for Nortel GSN 3GPP Collection</li> </ul> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>

Product	Subproduct	Licensing Description
	<p>Oracle Communications Offline Mediation Controller Cartridge – RADIUS Bundle</p>	<p>The Oracle Communications Offline Mediation Controller Cartridge – RADIUS Bundle is intended to provide all the basic functionality required for collecting RADIUS event records from the radius server and creating billable CDRs.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge – RADIUS Bundle includes:</p> <ul style="list-style-type: none"> <li>• Oracle Communications Offline Mediation Controller Cartridge for RADIUS Collection</li> <li>• Oracle Communications Offline Mediation Controller Cartridge - RADIUS Session Aggregation</li> <li>• ASCII File Distribution Cartridge</li> </ul> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
	<p>Oracle Communications Offline Mediation Controller Cartridge – Voice Bundle</p>	<p>The Oracle Communications Offline Mediation Controller Cartridge – Voice Bundle is required for all new installations of Oracle Communications Offline Mediation Controller to support a GSM circuit voice core network (MSC).</p> <p>The Oracle Communications Offline Mediation Controller Cartridge – Voice Bundle is intended to provide all the basic functionality required to support collection and distribution of MSC billing records.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge – Voice Bundle includes:</p> <ul style="list-style-type: none"> <li>• Nortel MSC Collection Cartridge</li> <li>• One Distribution Cartridge for the MSC (see the Distribution Cartridge section for available cartridges)</li> </ul> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
	<p>Oracle Communications Offline Mediation Controller Cartridge for Nortel MCS 5200 to CS2000 AMA Bundle</p>	<p>The Oracle Communications Offline Mediation Controller Cartridge for Nortel MCS 5200 to CS2000 AMA Bundle is required for the creation and configuration of the cartridge chains that comprise the functionality of the MCS/AS 5200 Solution cartridge pack.</p> <p>The three possible cartridges in this solution:</p> <ul style="list-style-type: none"> <li>• Map Nortel MCS 5200 call data records (CDRs) to Nortel Networks Communication Server 2000 (CS 2000) CDRs prior to being output by a CS 2000 distribution cartridge (DC).</li> <li>• Support the enhancement and distribution of CS 2000 SN09 AMA DNS records.</li> <li>• Collect MCS 5200 data and distributes the MCS 5200 IPDR data.</li> </ul> <p>The Oracle Communications Offline Mediation Controller Cartridge for Nortel MCS 5200 to CS2000 AMA Bundle includes:</p> <ul style="list-style-type: none"> <li>• MCS 5200 Collection Cartridge</li> </ul>

Product	Subproduct	Licensing Description
		<ul style="list-style-type: none"> <li>• Nortel CS2000 AMA DNS Collection Cartridge</li> <li>• MCS 5200 Session Aggregation AP Cartridge</li> <li>• MCS 5200 to Nortel CS2K AMA EP Cartridge</li> <li>• Nortel CS2000 AMA DNS Distribution Cartridge</li> <li>• MCS 5200 Distribution Cartridge</li> </ul> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
Oracle Communications Offline Mediation Controller Cartridges: Collection	Oracle Communications Offline Mediation Controller Cartridge – NetFlow Collection	<p>The Oracle Communications Offline Mediation Controller Cartridge – NetFlow Collection collects raw NetFlow per-flow records. It supports NetFlow versions 1, 5, and 7.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge – NetFlow Collection also transforms massive amounts of raw data into usable usage information (e.g., track web traffic volumes to and from hosted web servers).</p> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
	Oracle Communications Offline Mediation Controller Cartridge – SNMP Collection	<p>The Oracle Communications Offline Mediation Controller Cartridge – SNMP Collection is a component of the SNMP Data Collection Framework that gathers data from SNMP-enabled devices.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge – SNMP Collection gathers a set of statistics at user-defined intervals, adds some basic and configuration data (such as timestamp and collection rate), and passes it on to the next node in the chain.</p> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
	Oracle Communications Offline Mediation Controller Cartridge – Syslog Collection	<p>The Oracle Communications Offline Mediation Controller Cartridge – Syslog Collection collects syslog files from multiple devices.</p> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
	Oracle Communications Offline Mediation Controller Cartridge for	<p>The Oracle Communications Offline Mediation Controller Cartridge for Nortel DMS OM Collection provides functionality to gather files containing operational metrics (OM) records from various telecom switches using file transfer protocol (FTP).</p>

Product	Subproduct	Licensing Description
	Nortel DMS OM Collection	<p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
	Oracle Communications Offline Mediation Controller Cartridge for Nortel CS2000 Collection	<p>The Oracle Communications Offline Mediation Controller Cartridge for Nortel CS2000 Collection supports the collection of Nortel Networks CS 2000 SN06 AMADNS records.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge for Nortel CS2000 Collection supports the following file transfer modes for Nortel Networks SuperNode Data Manager (SDM) and SuperNode Billing Application (SBA):</p> <ul style="list-style-type: none"> <li>• Outbound File Transfer, where files are pushed to the Collection Cartridge</li> <li>• Inbound File Transfer, where files are pulled by FTP from the SBA directly, or from an intermediate FTP server that is provisioned to retrieve the records from the SBA</li> </ul> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
	Oracle Communications Offline Mediation Controller Cartridge for Nortel DMS 100 MMP Collection	<p>The Oracle Communications Offline Mediation Controller Cartridge for Nortel DMS 100 MMP (Multi Market Platform) Collection provides functionality to gather records from various telecom switches.</p> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
	Oracle Communications Offline Mediation Controller Cartridge for Nortel DMS SMDR Collection	<p>The Oracle Communications Offline Mediation Controller Cartridge for Nortel DMS SMDR Collection provides the ability to collect SMDR records from DMS-100 switches according to the specification DMS100 Family North American DMS-100 Station Message Detail Recording Reference Guide, DMSCCM12 Standard 19.03 October 2000.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge for Nortel DMS SMDR Collection also filters, enhances, and distributes SMDR records to multiple destinations, including a Billing Center and an Oracle database.</p> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
	Oracle Communications	<p>The Oracle Communications Offline Mediation Controller Cartridge for Nortel MCS 5200 Collection enables the collection of Nortel MCS</p>

Product	Subproduct	Licensing Description
	Offline Mediation Controller Cartridge for Nortel MCS 5200 Collection	<p>5200 v3.0 data.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge for Nortel MCS 5200 Collection receives and processes accounting records from the MCS 5200 device in the form of IPDR data files, and outputs the data in Network Accounting Record (NAR) format.</p> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
	Oracle Communications Offline Mediation Controller Cartridge for Nortel MSC Collection	<p>The Oracle Communications Offline Mediation Controller Cartridge for Nortel MSC Collection supports the Nortel MSC, including NSS 13, 15, 16, 17, 18 releases and planned support for future releases.</p> <p>Collection from the MSC is supported with two interfaces, FTP and OpenFTP (Real Time Billing). OpenFTP enables Hot Billing, with CDRs collected immediately from the MSC and forwarded to the billing system.</p> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p> <p>If the Oracle Communications Offline Mediation Controller Cartridge for Nortel MSC Collection is purchased, an Oracle Communications Offline Mediation Controller Cartridge for Nortel MSC Distribution must be purchased as well.</p>
Oracle Communications Offline Mediation Controller Cartridges: Enhancement	Oracle Communications Offline Mediation Controller Cartridge – Flexible Routing	<p>The Oracle Communications Offline Mediation Controller Cartridge – Flexible Routing support CDRs for pre-paid subscribers, inbound roamers, and outbound roamers to be separated from the regular post-paid subscriber CDR stream.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge – Flexible Routing simplifies the detection of the type of CDR to enable routing to the correct destination. Numerous routing algorithms are supported, including:</p> <ul style="list-style-type: none"> <li>• Pre-paid subscribers can be identified by the Charging Characteristics field or APN</li> <li>• Inbound roamers can be detected by the MCC and MNC contained in the IMSI</li> <li>• Outbound roamers can be detected by the SGSN IP address</li> <li>• Routing on APN NI, APN OI, Mobile Country Code (MCC), GGSN IP, SGSN IP Address List and volume = 0 bytes</li> </ul> <p>By configuring the required information in the Offline Mediation Controller GUI, the Oracle Communications Offline Mediation Controller Cartridge – Flexible Routing becomes simple and straightforward to implement and maintain; there is no need for an operator to work within a rigid structure where the information is hard coded implemented in a complicated fashion.</p> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with</p>

Product	Subproduct	Licensing Description
		<p>the license of Oracle Communications Advanced Billing and Revenue Management.</p>
	<p>Oracle Communications Offline Mediation Controller Cartridge – Record Filtering</p>	<p>The Oracle Communications Offline Mediation Controller Cartridge – Record Filtering helps automatically filter out (delete) records according to multiple selection criteria. Filtering is enabled with GUI check boxes or lists for the following criteria:</p> <ul style="list-style-type: none"> <li>• CDR Type: G-CDR, S-CDR, M-CDR, S-SMO-CDR, S-SMT-CDR</li> <li>• List of APNs</li> <li>• List of SMS-Cs</li> </ul> <p>The Oracle Communications Offline Mediation Controller Cartridge – Record Filtering also suppresses certain optional fields in the CDR if they are not required for billing; suppression of each field is configurable in the GUI. GUI-based configuration ensures it is easy to define and modify the filtering criteria, with no custom code or complicated configuration required.</p> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
<p>Oracle Communications Offline Mediation Controller Cartridges: Aggregation</p>	<p>Oracle Communications Offline Mediation Controller Cartridge – NetFlow Aggregation Processor</p>	<p>The Oracle Communications Offline Mediation Controller Cartridge – NetFlow Aggregation Processor helps to create one record per-session, per-hour.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge – NetFlow Aggregation Processor correlates session records based on:</p> <ul style="list-style-type: none"> <li>• Source and destination IP address</li> <li>• Source and destination port</li> <li>• IP protocol type</li> <li>• Day of year and hour</li> </ul> <p>The NetFlow Aggregation Processor Cartridge also aggregates usage into total bytes and total packets.</p> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
	<p>Oracle Communications Offline Mediation Controller Cartridge – Partial CDR Completion</p>	<p>The Oracle Communications Offline Mediation Controller Cartridge – Partial CDR Completion provides the Nortel SGSN to create partial records for an ongoing PDP session. It will drop some fields from the second partial onwards on the assumption that these fields never change. The QoS fields are exceptions, as the QoS field may show up in subsequent partial CDRs due to a change in their values. Some billing systems require all fields to be present.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge – Partial CDR Completion tracks the required fields in the first partial and adds them into subsequent partials, including the addition of a new QoS field value if applicable.</p> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline</p>

Product	Subproduct	Licensing Description
		Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.
	Oracle Communications Offline Mediation Controller Cartridge – Session CDR Aggregation	<p>The Oracle Communications Offline Mediation Controller Cartridge – Session CDR Aggregation provides the SGSN and GGSN to generate numerous partial records for a given subscriber session (PDP context). Implementing partial record generation on the GGSN and SGSN helps operators reduce their exposure to loss of billing records if the GGSN or SGSN should go down. Partial records also enable fraud systems to monitor on-going sessions.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge – Session CDR Aggregation correlates CDRs on a per-session basis, and for a single session it will output a single G-CDR and one (or more) S-CDRs (one S-CDR for each SGSN used during the session). For G-CDRs, the AP sums the duration of the session and concatenates the List Of Traffic Volumes and the SGSN Address in the G-CDR. Likewise for S-CDRs, the AP sums the duration and concatenates the List Of Traffic Volumes for each SGSN used during the session.</p> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
	Oracle Communications Offline Mediation Controller Cartridge – Session CDR Record Grouping	<p>The Oracle Communications Offline Mediation Controller Cartridge – Session CDR Record Grouping groups GGSN, SGSN, and Openwave WAP records on a per-session basis. All CDRs for a session are placed close together in the CDR stream sent downstream.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge – Session CDR Record Grouping also enables the identification of inbound roamer S-CDRs based on the operator's Mobile Country Code (MCC) and Mobile Network Code (MNC). The MCC and MNC are derived from the IMSI (International Mobile Subscriber Identity) attribute in S-CDR; if the MCC and MNC do not match the operator's, the S-CDR is marked as an inbound roamer and the CDR can be routed to a different destination.</p> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
Oracle Communications Offline Mediation Controller Cartridges: Distribution	Oracle Communications Offline Mediation Controller Cartridge – Near Real Time Xfer Distribution	<p>The Oracle Communications Offline Mediation Controller Cartridge – Near Real Time Xfer Distribution provides distribution in near real time using a Nortel Networks proprietary protocol.</p> <p><b>Prerequisites:</b></p> <p>Requires full use license of Oracle Communications Offline Mediation Controller. (Full use license – this requirement is not met through Offline Mediation Controller licenses bundled with other products.)</p>
	Oracle Communications	The Oracle Communications Offline Mediation Controller Cartridge – XML Distribution distributes files in Extensible Markup Language

Product	Subproduct	Licensing Description
	Offline Mediation Controller Cartridge – XML Distribution	(XML) format. <b>Prerequisites:</b> Requires full use license of Oracle Communications Offline Mediation Controller. (Full use license – this requirement is not met through Offline Mediation Controller licenses bundled with other products.)
	Oracle Communications Offline Mediation Controller Cartridge for Nortel CS2000 AMA DNS Distribution	The Oracle Communications Offline Mediation Controller Cartridge for Nortel CS2000 AMA DNS Distribution supports the distribution of Nortel CS 2000 SN09 AMADNS records. <b>Prerequisites:</b> Requires full use license of Oracle Communications Offline Mediation Controller. (Full use license – this requirement is not met through Offline Mediation Controller licenses bundled with other products.)
	Oracle Communications Offline Mediation Controller Cartridge for Nortel MCS 5200 IPDR Distribution	The Oracle Communications Offline Mediation Controller Cartridge for Nortel MCS 5200 IPDR Distribution supports the distribution of MCS 5200 IPDR records. <b>Prerequisites:</b> Requires full use license of Oracle Communications Offline Mediation Controller. (Full use license – this requirement is not met through Offline Mediation Controller licenses bundled with other products.)
	Oracle Communications Offline Mediation Controller Cartridge for Nortel MSC AMA DIRP Distribution	The Oracle Communications Offline Mediation Controller Cartridge for Nortel MSC AMA DIRP Distribution distributes AMA DIRP-encoded CDRs. <b>Prerequisites:</b> Requires full use license of Oracle Communications Offline Mediation Controller. (Full use license – this requirement is not met through Offline Mediation Controller licenses bundled with other products.)
	Oracle Communications Offline Mediation Controller Cartridge for Nortel MSC ASCII Distribution	The Oracle Communications Offline Mediation Controller Cartridge for Nortel MSC ASCII Distribution distributes records in ASCII file format. <b>Prerequisites:</b> Requires full use license of Oracle Communications Offline Mediation Controller. (Full use license – this requirement is not met through Offline Mediation Controller licenses bundled with other products.)
	Oracle Communications Offline Mediation Controller Cartridge for Nortel MSC ASN.1 Distribution	The Oracle Communications Offline Mediation Controller Cartridge for Nortel MSC ASN.1 Distribution distributes ASN.1-encoded CDRs according to 3GPP 32.005. <b>Prerequisites:</b> Requires full use license of Oracle Communications Offline Mediation Controller. (Full use license – this requirement is not met through Offline Mediation Controller licenses bundled with other products.)
	Oracle Communications Offline Mediation Controller Cartridge for Nortel MSC Database Distribution	The Oracle Communications Offline Mediation Controller Cartridge for Nortel MSC Database Distribution provides database storage and reporting solution for the Nortel MSC. CDRs are stored in a database, which can then be queried using a reporting tool. Administrators can search for specific CDRs based on CDR type, time of call, originating/called number, or any attribute in the CDR to analyze, verify, and resolve customer problems.  The solution provides: <ul style="list-style-type: none"> <li>• A pre-integrated Collection Cartridge and the JDBC Database Distribution Cartridge for the Nortel MSC, including simultaneous distribution of AMA records to a billing system and database.</li> <li>• An Oracle Database schema that defines the database tables</li> </ul>

Product	Subproduct	Licensing Description
		<p>and stored procedures for managing data partitioning and deletion of aged records; Oracle Database must be purchased separately.</p> <p><b>Prerequisites:</b></p> <p>Requires full use license of Oracle Communications Offline Mediation Controller. (Full use license – this requirement is not met through Offline Mediation Controller licenses bundled with other products.)</p>
Oracle Communications Offline Mediation Controller Cartridge Kits	Oracle Communications Offline Mediation Controller Cartridge Kit – IPDRv2 Distribution	<p>The Oracle Communications Offline Mediation Controller Cartridge Kit – IPDRv2 Distribution supports the distribution of Internet Protocol Detail Record (IPDR) v2.0 formatted files.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge Kit – IPDRv2 Distribution leverages the functionality provided in Oracle Communications Offline Mediation Controller to extend the data modeling of mediation results, as described in the Developer Guide.</p> <p><b>Prerequisites:</b></p> <p>Requires full use license of Oracle Communications Offline Mediation Controller. (Full use license – this requirement is not met through Offline Mediation Controller licenses bundled with other products.)</p>
	Oracle Communications Offline Mediation Controller Cartridge Kit – RADIUS Distribution	<p>The Oracle Communications Offline Mediation Controller Cartridge Kit – RADIUS Distribution distributes RADIUS packets via UDP. The distribution of standards-based RADIUS attributes and Vendor Specific Attributes (VSAs) are supported.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge Kit – RADIUS Distribution leverages the functionality provided in Oracle Communications Offline Mediation Controller to extend the data modeling of mediation results, as described in the Developer Guide.</p> <p><b>Prerequisites:</b></p> <p>Requires full use license of Oracle Communications Offline Mediation Controller. (Full use license – this requirement is not met through Offline Mediation Controller licenses bundled with other products.)</p>
	Oracle Communications Offline Mediation Controller Cartridge Kit – AMA File Collection	<p>The Oracle Communications Offline Mediation Controller Cartridge Kit – AMA File Collection supports the collection of Nortel AMA file records.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge Kit – AMA File Collection leverages the functionality provided in Oracle Communications Offline Mediation Controller to extend the data modeling of mediation results, as described in the Developer Guide.</p> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
	Oracle Communications Offline Mediation Controller Cartridge Kit – AMA File Distribution	<p>The Oracle Communications Offline Mediation Controller Cartridge Kit – AMA File Distribution supports the distribution of Nortel AMA file records.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge Kit – AMA File Distribution leverages the functionality provided in Oracle Communications Offline Mediation Controller to extend the data modeling of mediation results, as described in the Developer Guide.</p> <p><b>Prerequisites:</b></p> <p>Requires full use license of Oracle Communications Offline Mediation Controller. (Full use license – this requirement is not met through</p>

Product	Subproduct	Licensing Description
		Offline Mediation Controller licenses bundled with other products.)
	Oracle Communications Offline Mediation Controller Cartridge Kit – AMADNS Distribution	<p>The Oracle Communications Offline Mediation Controller Cartridge Kit – AMADNS Distribution supports the distribution of Nortel AMADNS records.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge Kit – AMADNS Distribution leverages the functionality provided in Oracle Communications Offline Mediation Controller to extend the data modeling of mediation results, as described in the Developer Guide.</p> <p><b>Prerequisites:</b></p> <p>Requires full use license of Oracle Communications Offline Mediation Controller. (Full use license – this requirement is not met through Offline Mediation Controller licenses bundled with other products.)</p>
	Oracle Communications Offline Mediation Controller Cartridge Kit – ASCII Delimited Distribution	<p>The Oracle Communications Offline Mediation Controller Cartridge Kit – ASCII Delimited Distribution is responsible for distributing ASCII files to a downstream application or BSS/OSS.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge Kit – ASCII Delimited Distribution leverages the functionality provided in Oracle Communications Offline Mediation Controller to extend the data modeling of mediation results, as described in the Developer Guide.</p> <p><b>Prerequisites:</b></p> <p>Requires full use license of Oracle Communications Offline Mediation Controller. (Full use license – this requirement is not met through Offline Mediation Controller licenses bundled with other products.)</p>
	Oracle Communications Offline Mediation Controller Cartridge Kit – ASN.1 File Collection	<p>The Oracle Communications Offline Mediation Controller Cartridge Kit – ASN.1 File Collection supports in the collection of an ASN.1 encoded file</p> <p>The Oracle Communications Offline Mediation Controller Cartridge Kit – ASN.1 File Collection leverages the functionality provided in Oracle Communications Offline Mediation Controller to extend the data modeling of mediation results, as described in the Developer Guide.</p> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
	Oracle Communications Offline Mediation Controller Cartridge Kit – Flexible ASCII Collection	<p>The Oracle Communications Offline Mediation Controller Cartridge Kit – Flexible ASCII Collection supports the collection of records with a broad range of ASCII file formats. It is backward compatible with the file formats supported by the ASCII Collection Cartridge.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge Kit – Flexible ASCII Collection also includes support for configurable field delimiters and new file types, such as files containing multi-line records, and files containing other types of header and/or trailer records.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge Kit – Flexible ASCII Collection leverages the functionality provided in Oracle Communications Offline Mediation Controller to extend the data modeling of mediation results, as described in the Developer Guide.</p> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle</p>

Product	Subproduct	Licensing Description
		<p>Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
	<p>Oracle Communications Offline Mediation Controller Cartridge Kit – IPDR Collection</p>	<p>The Oracle Communications Offline Mediation Controller Cartridge Kit – IPDR Collection supports the collection of Internet Protocol Detail Record (IPDR) v1.0 and v2.0 formatted files.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge Kit – IPDR Collection leverages the functionality provided in Oracle Communications Offline Mediation Controller to extend the data modeling of mediation results, as described in the Developer Guide.</p> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
	<p>Oracle Communications Offline Mediation Controller Cartridge Kit – JDBC Database Distribution</p>	<p>The Oracle Communications Offline Mediation Controller Cartridge Kit – JDBC Database Distribution is used to route DMS-MSC data (GCDRs and GHOT records) into the Oracle database.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge Kit – JDBC Database Distribution is part of the optional Database Storage and Reporting solution. See the setup guide for the procedures necessary to configure this solution.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge Kit – JDBC Database Distribution leverages the functionality provided in Oracle Communications Offline Mediation Controller to extend the data modeling of mediation results, as described in the Developer Guide.</p> <p><b>Prerequisites:</b></p> <p>Requires full use license of Oracle Communications Offline Mediation Controller and Oracle Database Standard Edition. (Full use license – this requirement is not met through OMC licenses bundled with other products.)</p>
	<p>Oracle Communications Offline Mediation Controller Cartridge Kit – Network Acct Record Collection</p>	<p>The Oracle Communications Offline Mediation Controller Cartridge Kit – Network Acct Record Collection supports the collection of NARs generated by Offline Mediation Controller.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge Kit – Network Acct Record Collection leverages the functionality provided in Oracle Communications Offline Mediation Controller to extend the data modeling of mediation results, as described in the Developer Guide.</p> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
	<p>Oracle Communications Offline Mediation Controller Cartridge Kit – Network Acct Record</p>	<p>The Oracle Communications Offline Mediation Controller Cartridge Kit – Network Acct Record Distribution supports the distribution of NARs generated by Offline Mediation Controller.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge Kit – Network Acct Record Distribution leverages the functionality provided in Oracle Communications Offline Mediation Controller to</p>

Product	Subproduct	Licensing Description
	Distribution	<p>extend the data modeling of mediation results, as described in the Developer Guide.</p> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
	Oracle Communications Offline Mediation Controller Cartridge Kit – Programmable Aggregation Processor	<p>The Oracle Communications Offline Mediation Controller Cartridge Kit – Programmable Aggregation Processor enables the formation of a single record from multiple records and provides pre-defined operations such as summation, maximum attribute value calculation, appending lists, string concatenation, etc.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge Kit – Programmable Aggregation Processor leverages the functionality provided in Oracle Communications Offline Mediation Controller to extend the data modeling of mediation results, as described in the Developer Guide.</p> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
	Oracle Communications Offline Mediation Controller Cartridge Kit – Real-Time ASCII File Collection	<p>The Oracle Communications Offline Mediation Controller Cartridge Kit – Real-Time ASCII File Collection supports the collection of Real-time ASCII files containing a record definition header, a record delimiter with a linefeed value, and a field delimiter with a comma value.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge Kit – Real-Time ASCII File Collection leverages the functionality provided in Oracle Communications Offline Mediation Controller to extend the data modeling of mediation results, as described in the Developer Guide.</p> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
	Oracle Communications Offline Mediation Controller Cartridge Kit – Record Enhancement LDAP EP	<p>The Oracle Communications Offline Mediation Controller Cartridge Kit – Record Enhancement LDAP EP enhances incoming NARs with data from a LDAP file.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge Kit – Record Enhancement LDAP EP leverages the functionality provided in Oracle Communications Offline Mediation Controller to extend the data modeling of mediation results, as described in the Developer Guide.</p> <p><b>Prerequisites:</b></p> <ul style="list-style-type: none"> <li>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</li> </ul>

Product	Subproduct	Licensing Description
		<ul style="list-style-type: none"> <li>Directory Services Plus OR Identity and Access Management Suite Plus for Oracle Applications</li> </ul>
	Oracle Communications Offline Mediation Controller Cartridge Kit – Record Enhancement Local File EP	<p>The Oracle Communications Offline Mediation Controller Cartridge Kit – Record Enhancement Local File EP enhances incoming NARs with data from a local file.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge Kit – Record Enhancement Local File EP leverages the functionality provided in Oracle Communications Offline Mediation Controller to extend the data modeling of mediation results, as described in the Developer Guide.</p> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
	Oracle Communications Offline Mediation Controller Cartridge Kit – Record Enhancement Remote File EP	<p>The Oracle Communications Offline Mediation Controller Cartridge Kit – Record Enhancement Remote File EP enhances the incoming NARs with data from an external file.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge Kit – Record Enhancement Remote File EP leverages the functionality provided in Oracle Communications Offline Mediation Controller to extend the data modeling of mediation results, as described in the Developer Guide.</p> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
	Oracle Communications Offline Mediation Controller Cartridge Kit – Record Processing EP	<p>The Oracle Communications Offline Mediation Controller Cartridge Kit – Record Processing EP enhances incoming NARs with the user-defined rules set in the NPL file.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge Kit – Record Processing EP leverages the functionality provided in Oracle Communications Offline Mediation Controller to extend the data modeling of mediation results, as described in the Developer Guide.</p> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
	Oracle Communications Offline Mediation Controller Cartridge Kit – Sequencing EP	<p>The Oracle Communications Offline Mediation Controller Cartridge Kit – Sequencing EP allows for the detection, alarming, and logging of duplicate records. The EP also sequences records belonging to a single session.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge Kit – Sequencing EP leverages the functionality provided in Oracle Communications Offline Mediation Controller to extend the data modeling of mediation results, as described in the Developer Guide.</p>

Product	Subproduct	Licensing Description
		<p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>
	<p>Oracle Communications Offline Mediation Controller Cartridge Kit – XML Distribution</p>	<p>The Oracle Communications Offline Mediation Controller Cartridge Kit – XML Distribution distributes files in Extensible Markup Language (XML) format.</p> <p>The Oracle Communications Offline Mediation Controller Cartridge Kit – XML Distribution leverages the functionality provided in Oracle Communications Offline Mediation Controller to extend the data modeling of mediation results, as described in the Developer Guide.</p> <p><b>Prerequisites:</b></p> <p>Requires full use license of Oracle Communications Offline Mediation Controller (Full use license – this requirement is not met through Offline Mediation Controller licenses bundled with other products).</p>
<p>Oracle Communications Offline Mediation Controller Utilities</p>	<p>Oracle Communications Offline Mediation Controller Utility – Record Editor</p>	<p>The Oracle Communications Offline Mediation Controller – Record Editor allows customer to edit Network Accounting Records (NARs) and submit them to the node chain to be processed and distributed to downstream applications.</p> <p><b>Prerequisites:</b></p> <p>Requires either a full use license of Oracle Communications Offline Mediation Controller or a restricted use license of Oracle Communications Offline Mediation Controller. Restricted use license of Oracle Communications Offline Mediation Controller comes with the license of Oracle Communications Advanced Billing and Revenue Management.</p>

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Adventnet	SNMP API version 4.0 Service Pack 7	SNMP	See <a href="http://www.adventnet.com/products/snmp/license.html">http://www.adventnet.com/products/snmp/license.html</a> .
OSS Nokalva	OSS ASN.1 tools for Java version 6.2	Builds	See <a href="http://www.oss.com/company/copyright.html">http://www.oss.com/company/copyright.html</a> .

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5. `com.google.j2objc:j2objc-annotations:1.3`

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6. `org.checkerframework:checker-qual:2.8.1`

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7. `org.codehaus.mojo:animal-sniffer-annotations:1.17`

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