

Oracle® Communications Billing and Revenue Management

ECE RADIUS Gateway Protocol Implementation Conformance Statement



Release 15.2
G35865-01
January 2026



G35865-01

Copyright © 2016, 2026, 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

About This Content

1 RADIUS Protocol

Section Compliance	1
Access-Request AVPs	5
Access-Accept AVPs	6
Access-Reject AVPs	7
Access-Challenge AVPs	7

2 RADIUS Accounting Protocol

Section Compliance	1
Accounting-Request AVPs	2
Accounting-Response AVPs	3

About This Content

This guide serves as a protocol implementation compliance statement (PICS) for Oracle Communications Billing and Revenue Management Elastic Charging Engine (ECE) Remote Authentication Dial In User Service (RADIUS) Gateway. Each chapter lists the supported messages and attribute-value pairs for the RADIUS authentication, authorization, and accounting protocols.

Audience

This guide is intended for system administrators, product integrators, and developers. Readers must be familiar with the following:

- Elastic Charging Engine
- RADIUS protocol
- RADIUS accounting protocol

1

RADIUS Protocol

Learn how Oracle Communications Billing and Revenue Management Elastic Charging Engine (ECE) Remote Authentication Dial In User Service (RADIUS) Gateway maps the RADIUS access-control messages for the RADIUS protocol defined in RFC-2865 and RFC-2869.

Topics in this document:

- [Section Compliance](#)
- [Access-Request AVPs](#)
- [Access-Accept AVPs](#)
- [Access-Reject AVPs](#)
- [Access-Challenge AVPs](#)

See also "[RADIUS Accounting Protocol](#)".

Section Compliance

[Table 1-1](#) lists the compliance information for the RADIUS protocol sections in RFC-2865.

Table 1-1 RFC-2865 Section Compliance

Section Number	Section	Status	Notes
1	Introduction	Not applicable	-
1.1	Specification of Requirements	Not applicable	-
1.2	Terminology	Not applicable	-
2	Operation	Partially supported	-
2.1	Challenge/Response	Supported	-
2.2	Interoperation with PAP and CHAP	Not supported	-
2.3	Proxy	Not applicable	-
2.4	Why UDP?	Not applicable	-
2.5	Retransmission Hints	Supported	-
2.6	Keep-Alives Considered Harmful	Supported	-
3	Packet Format	Supported	-
4	Packet Types	Supported	-
4.1	Access-Request	Supported	-
4.2	Access-Accept	Supported	-
4.3	Access-Reject	Supported	-
4.4	Access-Challenge	Supported	-
5	Attributes	Supported	-
5.1	User-Name	Supported	-

Table 1-1 (Cont.) RFC-2865 Section Compliance

Section Number	Section	Status	Notes
5.2	User-Password	Supported	-
5.3	CHAP-Password	Supported	-
5.4	NAS-IP-Address	Supported	-
5.5	NAS-Port	Supported	-
5.6	Service-Type	Supported	-
5.7	Framed-Protocol	Supported	-
5.8	Framed-IP-Address	Supported	-
5.9	Framed-IP-Netmask	Supported	-
5.10	Framed-Routing	Supported	-
5.11	Filter-Id	Supported	-
5.12	Framed-MTU	Supported	-
5.13	Framed-Compression	Supported	-
5.14	Login-IP-Host	Supported	-
5.15	Login-Service	Supported	-
5.16	Login-TCP-Port	Supported	-
5.17	(unassigned)	Supported	-
5.18	Reply-Message	Supported	-
5.19	Callback-Number	Supported	-
5.20	Callback-Id	Supported	-
5.21	(unassigned)	Supported	-
5.22	Framed-Route	Supported	-
5.23	Framed-IPX-Network	Supported	-
5.24	State	Supported	-
5.25	Class	Supported	-
5.26	Vendor-Specific	Supported	-
5.27	Session-Timeout	Supported	-
5.28	Idle-Timeout	Supported	-
5.29	Termination-Action	Supported	-
5.30	Called-Station-Id	Supported	-
5.31	Calling-Station-Id	Supported	-
5.32	NAS-Identifier	Supported	-
5.33	Proxy-State	Supported	-
5.34	Login-LAT-Service	Supported	-
5.35	Login-LAT-Node	Supported	-
5.36	Login-LAT-Group	Supported	-
5.37	Framed-AppleTalk-Link	Supported	-
5.38	Framed-AppleTalk-Network	Supported	-

Table 1-1 (Cont.) RFC-2865 Section Compliance

Section Number	Section	Status	Notes
5.39	Framed-AppleTalk-Zone	Supported	-
5.40	CHAP-Challenge	Supported	-
5.41	NAS-Port-Type	Supported	-
5.42	Port-Limit	Supported	-
5.43	Login-LAT-Port	Supported	-
5.44	Table of Attributes	Supported	-
6	IANA Considerations	No requirement	-
6.1	Definition of Terms	No requirement	-
6.2	Recommended Registration Policies	No requirement	-
7	Examples	Supported	-
7.1	User Telnet to Specified Host	Supported	-
7.2	Framed User Authenticating with CHAP	Supported	-
7.3	User with Challenge-Response card	Not supported	-
8	Security Considerations	Not supported	-
9	Change Log	No requirement	-
10	References	No requirement	-
11	Acknowledgements	No requirement	-
12	Chair's Address	No requirement	-
13	Authors' Addresses	No requirement	-
14	Full Copyright Statement	No requirement	-

[Table 1-2](#) lists the compliance information for the RADIUS protocol sections in RFC-2869.

Table 1-2 RFC-2869 Section Compliance

Section Number	Section	Status	Notes
1	Introduction	Not applicable	-
1.1	Specification of Requirements	Not applicable	-
1.2	Terminology	Not applicable	-
2	Operation	Partially supported	-
2.1	RADIUS support for Interim Accounting Updates	Not supported	-
2.2	RADIUS support for Apple Remote Access Protocol	Not supported	-
2.3	RADIUS Support for Extensible Authentication Protocol (EAP)	Supported	-
2.3.1	Protocol Overview	Supported	-
2.3.2	Retransmission	Supported	-
2.3.3	Fragmentation	Not supported	-

Table 1-2 (Cont.) RFC-2869 Section Compliance

Section Number	Section	Status	Notes
2.3.4	Examples	Supported	-
2.3.5	Alternative Uses	Supported	-
3	Packet Format	Supported	-
4	Packet Types	Supported	-
5	Attributes	Partially supported	-
5.1	Acct-Input-Gigawords	Not supported	-
5.2	Acct-Output-Gigawords	Not supported	-
5.3	Event-Timestamp	Not supported	-
5.4	ARAP-Password	Not supported	-
5.5	ARAP-Features	Not supported	-
5.6	ARAP-Zone-Access	Not supported	-
5.7	ARAP-Security	Not supported	-
5.8	ARAP-Security-Data	Not supported	-
5.9	Password-Retry	Not supported	-
5.10	Prompt	Not supported	-
5.11	Connect-Info	Not supported	-
5.12	Configuration-Token	Not supported	-
5.13	EAP-Message	Supported	-
5.14	Message-Authenticator	Supported	-
5.15	ARAP-Challenge-Response	Not supported	-
5.16	Acct-Interim-Interval	Not supported	-
5.17	NAS-Port-Id	Supported	-
5.18	Framed-Pool	Not supported	-
5.19	Table of Attributes	Not supported	-
6	IANA Considerations	No requirement	-
7	Security Considerations	Supported	-
7.1	Message-Authenticator Security	Supported	-
7.2	EAP Security	Supported	-
7.2.1	Separation of EAP server and PPP authenticator	Not supported	-
7.2.2	Connection hijacking	Not supported	-
7.2.3	Man in the middle attacks	Not supported	-
7.2.4	Multiple databases	Not supported	-
7.2.5	Negotiation attacks	Not supported	-
8	References	No requirement	-
9	Acknowledgements	No requirement	-
10	Chair's Address	No requirement	-
11	Authors' Addresses	No requirement	-

Table 1-2 (Cont.) RFC-2869 Section Compliance

Section Number	Section	Status	Notes
12	Full Copyright Statement	No requirement	-

Access-Request AVPs

[Table 1-3](#) lists the compliance information for Access-Request attribute-value pairs (AVPs).

Table 1-3 Access-Request AVPs

RADIUS AVP	Status	Notes
User-Name	Supported	-
User-Password	Supported	-
CHAP-Password	Supported	-
CHAP-Challenge	Supported	-
NAS-IP-Address	Supported	-
NAS-Port	Supported	-
NAS-Port-Type	Supported	-
NAS-Identifier	Supported	-
Service-Type	Supported	-
Framed-Protocol	Supported	-
Framed-IP-Address	Supported	-
Framed-IP-Netmask	Supported	-
Framed-MTU	Supported	-
Framed-Compression	Supported	-
Login-IP-Host	Supported	-
Callback-Number	Supported	-
Called-Station-Id	Supported	-
Calling-Station-Id	Supported	-
State	Supported	-
Proxy-State	Supported	-
Login-LAT-Service	Supported	-
Login-LAT-Node	Supported	-
Login-LAT-Group	Supported	-
Login-LAT-Port	Supported	-
Vendor-Specific	Supported	-
EAP-Message	Supported	-
Message-Authenticator	Supported	-

Access-Accept AVPs

[Table 1-4](#) lists the compliance information for Access-Accept AVPs.

Table 1-4 Access-Accept AVPs

RADIUS AVP	Status	Notes
User-Name	Supported	-
Service-Type	Supported	-
Framed-Protocol	Supported	-
Framed-IP-Address	Supported	-
Framed-IP-Netmask	Supported	-
Framed-Routing	Supported	-
Framed-Route	Supported	-
Framed-IPX-Network	Supported	-
Framed-AppleTalk-Link	Supported	-
Framed-AppleTalk-Network	Supported	-
Framed-AppleTalk-Zone	Supported	-
Filter-Id	Supported	-
Framed-MTU	Supported	-
Framed-Compression	Supported	-
Login-IP-Host	Supported	-
Login-Service	Supported	-
Login-TCP-Port	Supported	-
Reply-Message	Supported	-
Callback-Number	Supported	-
Callback-Id	Supported	-
Class	Supported	-
Session-Timeout	Supported	-
Idle-Timeout	Supported	-
Termination-Action	Supported	-
State	Supported	-
Proxy-State	Supported	-
Login-LAT-Service	Supported	-
Login-LAT-Node	Supported	-
Login-LAT-Group	Supported	-
Login-LAT-Port	Supported	-
Port-Limit	Supported	-
Vendor-Specific	Supported	-
Acct-Session-Id	Supported	-
EAP-Message	Supported	-

Table 1-4 (Cont.) Access-Accept AVPs

RADIUS AVP	Status	Notes
Message-Authenticator	Supported	-

Access-Reject AVPs

[Table 1-5](#) lists the compliance information for Access-Reject AVPs.

Table 1-5 Access-Reject AVPs

RADIUS AVP	Status	Notes
User-Name	Supported	-
Reply-Message	Supported	-
Class	Supported	-
Proxy-State	Supported	-
Vendor-Specific	Supported	-
Acct-Session-Id	Supported	-
EAP-Message	Supported	-
Message-Authenticator	Supported	-

Access-Challenge AVPs

[Table 1-6](#) lists the compliance information for Access-Challenge AVPs.

Table 1-6 Access-Challenge AVPs

RADIUS AVP	Status	Notes
Reply-Message	Supported	-
Session-Timeout	Supported	-
Idle-Timeout	Supported	-
State	Supported	-
Proxy-State	Supported	-
Vendor-Specific	Supported	-
EAP-Message	Supported	-
Message-Authenticator	Supported	-

RADIUS Accounting Protocol

Learn how Oracle Communications Billing and Revenue Management Elastic Charging Engine (ECE) Remote Authentication Dial In User Service (RADIUS) Gateway maps the RADIUS accounting messages for the RADIUS protocol defined in RFC-2866.

Topics in this document:

- [Section Compliance](#)
- [Accounting-Request AVPs](#)
- [Accounting-Response AVPs](#)

See also "[RADIUS Protocol](#)".

Section Compliance

[Table 2-1](#) lists the compliance information for the RADIUS Accounting protocol sections in RFC-2866.

Table 2-1 RFC-2866 Section Compliance

Section Number	Section	Status	Notes
1	Introduction	Not applicable	-
1.1	Specification of Requirement	Not applicable	-
1.2	Terminology	Not applicable	-
2	Operation	Supported	-
2.1	Proxy	Not supported	-
3	Packet Format	Supported	-
4	Packet Types	Supported	-
4.1	Accounting-Request	Supported	-
4.2	Accounting-Response	Supported	-
5	Attributes	Supported	-
5.1	Acct-Status-Type	Supported	-
5.2	Acct-Delay-Time	Supported	-
5.3	Acct-Input-Octets	Supported	-
5.4	Acct-Output-Octets	Supported	-
5.5	Acct-Session-Id	Supported	-
5.6	Acct-Authentic	Supported	-
5.7	Acct-Session-Time	Supported	-
5.8	Acct-Input-Packets	Supported	-
5.9	Acct-Output-Packets	Supported	-

Table 2-1 (Cont.) RFC-2866 Section Compliance

Section Number	Section	Status	Notes
5.10	Acct-Terminate-Cause	Supported	-
5.11	Acct-Multi-Session-Id	Supported	-
5.12	Acct-Link-Count	Supported	-
5.13	Table of Attributes	Supported	-
6	IANA Considerations	Supported	-
7	Security Considerations	Supported	-
8	Change Log	Not applicable	-
9	References	No requirement	-
10	Acknowledgements	No requirement	-

Accounting-Request AVPs

[Table 2-2](#) describes how ECE supports Accounting-Request attribute-value pairs (AVPs).

Table 2-2 Accounting-Request AVPs

RADIUS Accounting AVP	Status	Notes
User-Name	Supported	This is a mandatory AVP.
NAS-IP-Address	Supported	This is a mandatory AVP.
NAS-Identifier	Supported	This is a mandatory AVP.
NAS-Port-Type	Supported	-
Class	Supported	-
Service-Type	Supported	-
Framed-Protocol	Supported	-
Framed-IP-Address	Supported	-
Framed-IP-Netmask	Supported	-
Framed-MTU	Supported	-
Framed-Compression	Supported	-
Login-IP-Host	Supported	-
Callback-Number	Supported	-
Called-Station-Id	Supported	-
Calling-Station-Id	Supported	-
Proxy-State	Supported	-
Login-LAT-Service	Supported	-
Login-LAT-Node	Supported	-
Login-LAT-Group	Supported	-
Login-LAT-Port	Supported	-
CHAP-Challenge	Supported	-

Table 2-2 (Cont.) Accounting-Request AVPs

RADIUS Accounting AVP	Status	Notes
Acct-Status-Type	Supported	This is a mandatory AVP.
Acct-Delay-Time	Supported	-
Acct-Input-Octets	Supported	-
Acct-Output-Octets	Supported	-
Acct-Session-Id	Supported	This is a mandatory AVP.
Acct-Authentic	Supported	-
Acct-Session-Time	Supported	-
Acct-Input-Packets	Supported	-
Acct-Output-Packets	Supported	-
Acct-Terminate-Cause	Supported	-
Acct-Multi-Session-Id	Supported	-
Acct-Link-Count	Supported	-
Vendor-Specific	Supported	-

Accounting-Response AVPs

The Accounting-Response message does not contain any AVPs.