ETSI TS 129 199-22 V8.0.0 (2009-01)

Technical Specification

**Universal Mobile Telecommunications System (UMTS);
LTE;
Open Service Access (OSA);
Parlay X web services;
Part 22: Policy
(3GPP TS 29.199-22 version 8.0.0 Release 8)**

Reference
DTS/TSGC-0029199-22v800

Keywords
LTE, UMTS

ETSI

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Foreword

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Contents

Foreword

This Technical Specification has been produced by the 3rd Generation Partnership Project (3GPP).

3GPP acknowledges the contribution of the Parlay X Web Services specifications from The Parlay Group. The Parlay Group is pleased to see 3GPP acknowledge and publish the present document, and the Parlay Group looks forward to working with the 3GPP community to improve future versions of the present document.

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

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>>> 3   or greater indicates TSG approved document under change control.

>> y   the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.

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Introduction

The present document is part 22 of a multi-part deliverable covering the 3rd Generation Partnership Project; Technical Specification Group Core Network and Terminals; Open Service Access (OSA); Parlay X Web Services, as identified below:

Part 1:	"Common"
Part 2:	"Third party call"
Part 3:	"Call Notification"
Part 4:	"Short Messaging"
Part 5:	"Multimedia Messaging"
Part 6:	"Payment"
Part 7:	"Account management"
Part 8:	"Terminal Status"
Part 9:	"Terminal location"
Part 10:	"Call handling"
Part 11:	"Audio call"
Part 12:	"Multimedia conference"
Part 13:	"Address list management"
Part 14:	"Presence"
Part 15:	"Message Broadcast"
Part 16:	"Geocoding"
Part 17:	"Application driven Quality of Service (QoS)"
Part 18:	"Device capabilities and configuration"
Part 19:	"Multimedia streaming control"
Part 20:	"Multimedia multicast session management"
Part 21:	"Content management"
Part 22:	**"Policy"**

1 Scope

The present document is Part 22 of the Stage 3 Parlay X Web Services specification for Open Service Access (OSA).

The OSA specifications define an architecture that enables application developers to make use of network functionality through an open standardized interface, i.e. the OSA APIs. The concepts and the functional architecture for the OSA are contained in 3GPP TS 23.198 [3]. The requirements for OSA are contained in 3GPP TS 22.127 [2].

The present document specifies the Policy Web Service aspects of the interface. All aspects of the Policy Web Service are defined here, these being:

- Name spaces.

- Sequence diagrams.

- Data definitions.

- Interface specification plus detailed method descriptions.

- Fault definitions.

- Service policies.

- WSDL description of the interfaces.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2] 3GPP TS 22.127: "Service requirement for the Open Services Access (OSA); Stage 1".

[3] 3GPP TS 23.198: "Open Service Access (OSA); Stage 2".

[4] 3GPP TS 29.199-01: "Open Service Access (OSA); Parlay X web services; Part 1: Common".

[5] IETF RFC 3460: "Policy Core Information Model (PCIM) Extensions".

[6] IETF RFC 3198: "Terminology for Policy-Based Management".

[7] 3GPP TS 29.198-13: "Open Service Access (OSA) Application Programming Interface (API); Part 13: Policy management Service Capability Feature (SCF)".

[8] W3C Recommendation (2 May 2001): "XML Schema Part 2: Datatypes".

NOTE: Available at http://www.w3.org/TR/2001/REC-xmlschema-2-20010502/.

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in 3GPP TS 29.199-01 [4] apply.

Policy : An ordered combination of policy rules that defines how to administer, manage, and control access to resources. Derived from RFC 3460 [5] and RFC 3198 [6].

Policy Rule : A combination of conditions and actions to be performed if the condition is true.

Policy Action : Action (e.g. invocation of a function, script, code, workflow, etc) that is associated to a policy condition in a policy rule and that is executed when its associated policy condition results in "true" from the policy evaluation step.

Policy Condition : A condition is a Boolean predicate that yields true or false.

Policy Evaluation : The process of evaluating the policy conditions and executing the associated policy actions up to the point that the end of the policy is reached.

Policy Provisioning : The act of describing, creating, updating, deleting, provisioning, and viewing policies. A meta-model or representation scheme may be used in this activity.

Resource : any component, function, or application that can receive and process requests.

Role : a type of attribute that is used to select one or more policies for a set of entities and/or components from among a much larger set of available policies.

3.2 Abbreviations

For the purposes of the present document, the abbreviations given in 3GPP TR 21.905 [1] and in 3GPP TS 29.199-01 [4] apply.

4 Detailed service description

The Policy Web Service is defined to offer provisioning and evaluation functions for policies. This Specification is separated into four interfaces.

- PolicyProvisioning interface includes the operation to create, modify, view, and delete policies.

- PolicyEvaluation interface provides operations to request evaluation of policies.

- PolicyEventNotificationManager interface provides functions for starting and ending subscription of the notification about events.

- PolicyEventNotification interface is defined for delivering the notification to the application when the event occurs.

The Policy Web Service is defined to provide simple means for applications to make use policies to satisfy two purposes as follows:

- The first one is to provide the user defined policies for the 3rd party applications who want to personalize their services by using their own preference expressed as policies at a high level. At this level, policies could be defined and managed by 3rd party applications, and applied to any policy enabled service.

- The second one is to protect resources in network from unauthorized requests based on policies, therefore enables the network operators and service providers to control the access to their resources. Network resources can be accessed in a secure and controlled way and network operator could impose constraints on the usage of their services.

The Policy Web Service is provided with the architecture as shown in figure 4-1. This Policy Web Service is foc used on the easy and simplified way to manage and evaluate policy rules. It can interact with OSA/Parlay Policy Management SCF [7] or directly access network resource if necessary.
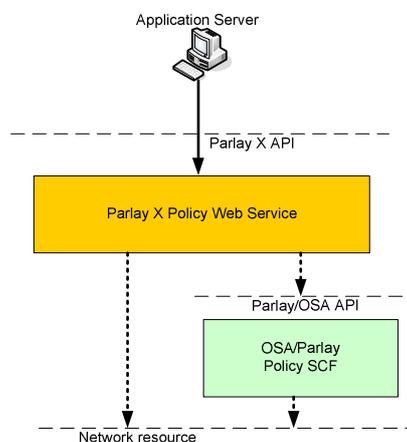
Figure 4-1 : Policy web service architecture

5 Namespaces

The PolicyProvisioning interface uses the namespace:

   http://www.csapi.org/wsdl/parlayx/policy_provisioning/v0_1

The PolicyEvaluation interface uses the namespace:

   http://www.csapi.org/wsdl/parlayx/policy_evaluation/v0_1

The PolicyEventNotificationManager interface uses the namespace:

   http://www.csapi.org/wsdl/parlayx/policy_event_notification_manager/v0_1

The PolicyEventNotification interface uses the namespace:

   http://www.csapi.org/wsdl/parlayx/policy_event_notification/notification/v0_1

The data types are defined in the namespace:

   http://www.csapi.org/schema/parlayx/policy/v0_1

The 'xsd' namespace is used in the present document to refer to the XML Schema data types defined in XML Schema [8]. The use of the name 'xsd' is not semantically significant.

6 Sequence diagrams

6.1 Creation of a conditionList or actionList

Pattern: Request / Response

It provides the mechanism for creating unattached conditionList or actionList. When the operation is invoked, the sequence diagram below shows both cases for creating a conditionList and an actionList. As the result of creation, a conditionID or actionID may be returned to the application. For deleting created conditionList or actionList, Application should use the conditionID or actionID.
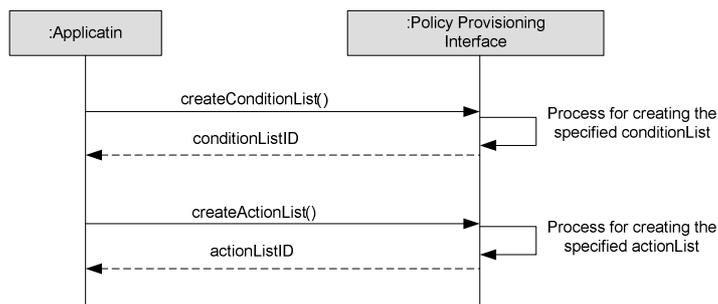
Figure 6.1 : Sequence Diagram of creating a conditionList and an actionList

6.2 Creation of a Rule

Pattern: Request / Response

It provides the mechanism for creating the specified rule. An application should assign the name for the new rule. As the result of the request, a ruleID may be returned to the application and application should keep this ID for management of the rule created.
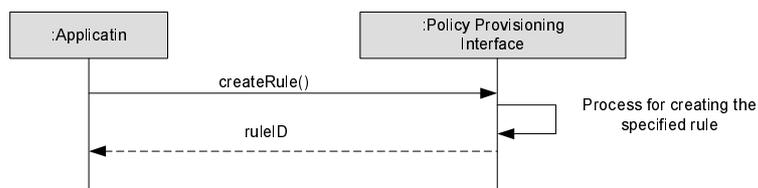
Figure 6.2 : Sequence Diagram of creating a rule

6.3 Querying DomainRuleList

Pattern: Request / Response

It provides the mechanism for retrieving a domainList or ruleList. If an application wants to request a ruleList in the specified domain, then it should be requested with the name of domain or rule. This sequence diagram below shows both cases.
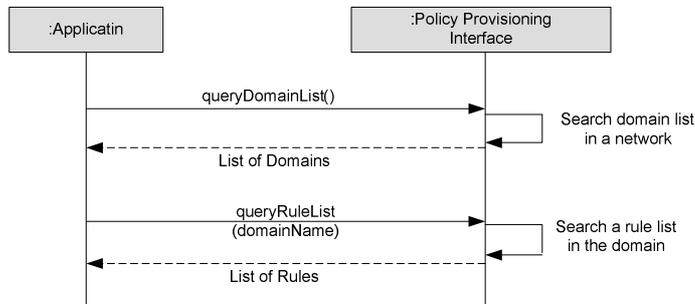
Figure 6.3 : Sequence Diagram of querying a domainList or ruleList

6.4 Querying of a ConditionList/Conditions or ActionList/Actions

Pattern: Request / Response

This sequence diagram below shows how to retrieve a conditionList or actionList, and the conditions or actions in the conditionList or actionList. An application may request an unattached conditionLists or actionLists to reuse conditions or actions in a conditionList or actionList.
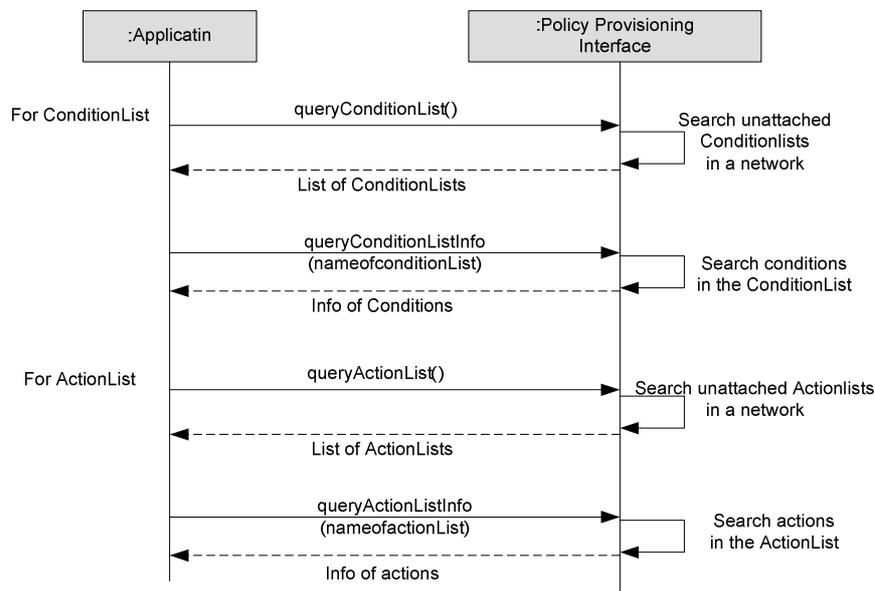
Figure 6.4 : Sequence Diagram of querying a conditionList or actionList and conditions or actions aggregated in the list

6.5 Policy Evaluation

Pattern: Request / Response

The following sequence diagram shows how to request the evaluation of a policy rule. An application should create a signature in a domain before requesting the evaluation. The name of signature should be clarified within a request for evaluation.
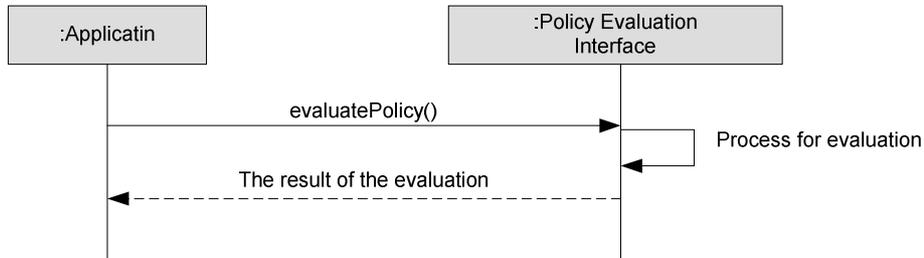
Figure 6.5 : Sequence Diagram of requesting an evaluation

6.6 Policy Event Notification

Pattern: Application Correlated Multiple Notifications.

The application can request to be notified of the event which is related with event types.
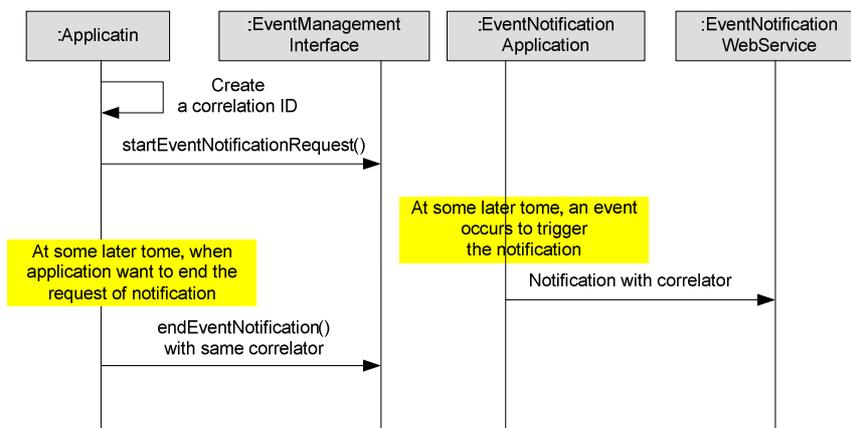
Figure 6.6 : Sequence Diagram of Event Notification

7 XML Schema data type definition

7.1 NameValuePair

This data structure is used to deliver a variable name-value pair.

Name	Type	Optional	Description
name	xsd:string	No	Name of the variable
value	xsd:string	No	Value of the variable
description	xsd:string	Yes	Description of the variable

7.2 VariableSet

This data structure is used to define the attribute which is used in a condition or action.

Name	Type	Optional	Description
name	xsd:string	No	Name of the variable set
type	xsd:string	No	Type of the variable
value	xsd:string	Yes	Value of the variable
description	xsd:string	Yes	Description of the variable

7.3 ConditionType

This enumeration is to clarify expressional syntax of conditions in a condition list.

Enumeration	Description
and	It indicates the conditions in a condition list are represented as an ANDed set.
or	It indicates the conditions in a condition list are represented as an ORed set.

7.4 Action

This data structure is to be performed when the condition expression evaluates to TRUE.

Name	Type	Optional	Description
actionName	xsd:string	No	Name of the action data set
nameValuePair	NameValuePair[1..unbounded]	No	Name and value pair of action
sequenceNumber	xsd:int	Yes	It indicates the relative position of ac action in the sequence of actions associated with a policy rule

7.5 Condition

This data structure is used to be associated with a policy rule.

Name	Type	Optional	Description
conditionName	xsd:string	No	Name of the condition data set
nameValuePair	NameValuePair[1..unbounded]	No	Name and value pair of condition
negated	xsd:Boolean	No	Individual conditions may either be negated(NOT Condition) or unnegated(Condition)

7.6 RuleInfo

Applications use this information structure to describe detailed information about a policy rule.

Name	Type	Optional	Description
roles	xsd:string[1..unbounded]	No	This represents the roles and role combinations associated with a policy rule. More than one role combination can be associated with a single policy rule.
description	xsd:string	Yes	This provides an informative description about a rule.
ruleUsage	xsd:string	Yes	This is to recommend how this policy rule should be used.
priority	xsd:int	Yes	This is to prioritize policy rules relative to each other in a Domain. Lager integer values indicate higher priority.
mandatory	xsd:boolean	Yes	This is to indicate whether evaluation of a policy rule is mandatory or not. The evaluation of a policy rule must be attempted if this value is TRUE. If it is FALSE, then the evaluation of the rule is "best effort" and may be ignored.
duration	Common:TimeMetric	Yes	Length of time a rule is valid for, null to use default time defined by service policy

7.7 EventType

This type is used for requesting notification about any change or deletion of one among a specified domain, rule, conditionlist, condition, actionlist, and action.

Enumeration	Description
domain	It means the event is related with a domain
rule	It means the event is related with a rule
conditionList	It means the event is related with a conditionList
condition	It means the event is related with a condition
actionList	It means the event is related with an actionList
action	It means the event is related with an action

8 Web Service interface definition

8.1 Interface: PolicyProvisioning

8.1.1 Operation: createDomain

- This operation is used for requesting the creation of the specified policy domain.

8.1.1.1 Input message: createDomainRequest

PartName	PartType	Optional	Description
domainName	xsd:string	No	The name of the domain to be created
roles	xsd:string[1..unbounded]	No	The name of the role to be associated with the domain
description	xsd:string	Yes	This provides a informative description about a domain

8.1.1.2 Output message: createDomainResponse

PartName	PartType	Optional	Description
domainID	xsd:string	No	The ID of domain

8.1.1.3 Referenced Faults

ServiceException from 3GPP TS 29.199-01 [4]:

- SVC0001: Service error

PolicyException from 3GPP TS 29.199-01 [4]:

- POL0001: Policy error

8.1.2 Operation: createRule

This operation is used to request the creation of the specified policy rule

8.1.2.1 Input message: createRuleRequest

PartName	PartType	Optional	Description
ruleName	xsd:string	No	The name of the rule to be created
domainName	xsd:string	No	The name of the domain to be created
conditionListName	xsd:string	No	The name of the condition list to be attached with the rule. This conditionList should be created before this request.
actionListName	xsd:string	No	The name of the action list to be attached to with the rule. This action list should be created before this request.
ruleInfo	RuleInfo	No	This describes rule information to be associated with the rule.

8.1.2.2 Output message: createRuleResponse

PartName	PartType	Optional	Description
ruleID	xsd:string	No	The ID of rule

8.1.2.3 Referenced Faults

ServiceException from 3GPP TS 29.199-01 [4]:

- SVC0001: Service error

PolicyException from 3GPP TS 29.199-01 [4]:

- POL0001: Policy error

8.1.3 Operation: modifyRule

This operation is used to request modifying the specified policy rule. The ruleID which was returned from Web Service when the rule was created, should be included in this request.

8.1.3.1 Input message: modifyRuleRequest

PartName	PartType	Optional	Description
ruleName	xsd:string	No	The name of the rule to be modified
ruleID	xsd:string	No	The ID of rule returned from the initial request of creation
conditionListName	xsd:string	Yes	The name of the condition list to change
actionListName	xsd:string	Yes	The name of the action list to change
ruleInfo	RuleInfo	Yes	This describes rule information to be associated with the rule

8.1.3.2 Output message: modifyRuleResponse

None

8.1.3.3 Referenced Faults

ServiceException from 3GPP TS 29.199-01 [4]:

- SVC0001: Service error

PolicyException from 3GPP TS 29.199-01 [4]:

- POL0001: Policy error

8.1.4 Operation: deleteDomain

This operation is used to request to delete a domain. The domainID which is returned from this Policy Web Service when the domain is created, it should be included in this request.

8.1.4.1 Input message: deleteDomainRequest

PartName	PartType	Optional	Description
domainID	xsd:string	No	The ID of domain returned from the initial request of creation

8.1.4.2 Output message: deleteDomainResponse

None

8.1.4.3 Referenced Faults

ServiceException from 3GPP TS 29.199-01 [4]:

- SVC0001: Service error

PolicyException from 3GPP TS 29.199-01 [4]:

- POL0001: Policy error

8.1.5   Operation: deleteRule

This operation is used to request to delete a rule. The ruleID which was returned from Web Service when the rule was created, should be included in this request.

8.1.5.1   Input message: deleteRuleRequest

PartName	PartType	Optional	Description
ruleID	xsd:string	No	The ID of rule returned from the initial request of creation

8.1.5.2   Output Message: deleteRuleRespons

None

8.1.5.3   Referenced Faults

ServiceException from 3GPP TS 29.199-01 [4]:

- SVC0001: Service error

PolicyException from 3GPP TS 29.199-01 [4]:

- POL0001: Policy error

8.1.6   Operation: queryDomainList

This operation is used to query a list of domains.

8.1.6.1   Input message: queryDomainList Request

PartName	PartType	Optional	Description
applicationID	xsd:string	No	Id of requestor

8.1.6.2   Output message: queryDomainList Response

PartName	PartType	Optional	Description
result	xsd:string[1..unbounded]	No	The list of Domains

8.1.6.3   Referenced Faults

ServiceException from 3GPP TS 29.199-01 [4]:

- SVC0001: Service error

PolicyException from 3GPP TS 29.199-01 [4]:

- POL0001: Policy error

8.1.7 Operation: queryRuleList

This operation is used to query a list of rules in a domain. It may return all of rule lists in the specified domain and in this case, domain name should be included within the request.

8.1.7.1 Input message: queryRuleList Request

PartName	PartType	Optional	Description
domainName	xsd:string	Yes	The name of the specified domain. Only when an application needs the list of rule in a domain, domain name is required.

8.1.7.2 Output message: queryRuleList Response

PartName	PartType	Optional	Description
result	xsd:string[1..unbounded]	No	The list of Rules

8.1.7.3 Referenced Faults

ServiceException from 3GPP TS 29.199-01 [4]:

- SVC0001: Service error

PolicyException from 3GPP TS 29.199-01 [4]:

- POL0001: Policy error

8.1.8 Operation: queryRuleInfo

This operation is used to query information of a rule in the specified domain.

8.1.8.1 Input message: queryRuleInfo Request

PartName	PartType	Optional	Description
ruleName	xsd:string	No	The name of the rule
domainName	xsd:string	No	The name of the domain

8.1.8.2 Output message: queryRuleInfo Response

PartName	PartType	Optional	Description
name	xsd:string	No	The name of the rule
conditionListName	xsd:string	No	The name of the condition list to be attached with the rule. This conditionList should be created before this request.
actionListName	xsd:string	No	The name of the action list to be attached to with the rule. This action list should be created before this request.
ruleInfo	RuleInfo	No	This describes rule information to be associated with the rule.

8.1.8.3 Referenced Faults

ServiceException from 3GPP TS 29.199-01 [4]:

- SVC0001: Service error

PolicyException from 3GPP TS 29.199-01 [4]:

- POL0001: Policy error

8.1.9 Operation: queryRoles

This operation is used to query roles defined in a specified domain. It could be used to retrieve the roles associated with the domain.

8.1.9.1 Input message: queryRoles Request

PartName	PartType	Optional	Description
domainName	xsd:string	No	The name of the domain

8.1.9.2 Output message: queryRoles Response

PartName	PartType	Optional	Description
domainName	xsd:string	No	The name of the domain
roles	xsd:string[1..unbounded]	No	The name of the roles to be associated with the domain

8.1.9.3 Referenced Faults

ServiceException from 3GPP TS 29.199-01 [4]:

- SVC0001: Service error

PolicyException from 3GPP TS 29.199-01 [4]:

- POL0001: Policy error

8.1.10 Operation: createConditonList

This operation is used to request the creation of an unattached conditionList.

8.1.10.1 Input message: createConditionList Request

PartName	PartType	Optional	Description
conditionListName	xsd:string	No	The name of the conditionList to be created.
conditions	Condition[1..bounded]	No	The set of conditions to be included in the conditionList.
conditionType	ConditionType	No	It describes the relationship of conditions in a condition list.
attributes	VariableSet[0..bounded]	Yes	It describes the attribute set if conditions need attributes

8.1.10.2 Output message: createConditionList Response

PartName	PartType	Optional	Description
conditionListID	xsd:string	No	The ID of conditionList

8.1.10.3 Referenced Faults

ServiceException from 3GPP TS 29.199-01 [4]:

- SVC0001: Service error

PolicyException from 3GPP TS 29.199-01 [4]:

- POL0001: Policy error

8.1.11   Operation: createActionList

This operation is used to request the creation of an unattached actionList.

8.1.11.1   Input message: createActionList Request

PartName	PartType	Optional	Description
actionListName	xsd:string	No	The name of the action list to be created
actions	Action[1..unbounded]	No	The set of actions to be included in the actionList.
attributes	VariableSet[0..unbounded]	Yes	It describes the attribute set if actions need attributes

8.1.11.2   Output message: createActionList Response

PartName	PartType	Optional	Description
actionListID	xsd:string	No	The ID of actionList

8.1.11.3   Referenced Faults

ServiceException from 3GPP TS 29.199-01 [4]:

- SVC0001: Service error

PolicyException from 3GPP TS 29.199-01 [4]:

- POL0001: Policy error

8.1.12   Operation: deleteConditionList

This operation is used to request deleting the specified unattached conditionList

8.1.12.1   Input message: deleteConditionListRequest

PartName	PartType	Optional	Description
conditionListID	xsd:string	No	The ID of conditionList returned from the initial request of creation

8.1.12.2   Output message: deleteConditionListResponse

None

8.1.12.3   Referenced Faults

ServiceException from 3GPP TS 29.199-01 [4]:

- SVC0001: Service error

PolicyException from 3GPP TS 29.199-01 [4]:

- POL0001: Policy error

8.1.13   Operation: deleteActionList

This operation is used to request deleting the specified unattached actionList.

8.1.13.1   Input message: deleteActionListRequest

PartName	PartType	Optional	Description
actionListID	xsd:string	No	The ID of request returned from the initial request of creation

8.1.13.2   Output message: deleteActionListResponse

None

8.1.13.3   Referenced Faults

ServiceException from 3GPP TS 29.199-01 [4]:

- SVC0001: Service error

PolicyException from 3GPP TS 29.199-01 [4]:

- POL0001: Policy error

8.1.14   Operation: queryConditionList

This operation is used to query the list of conditionLists which are unattached with any rule.

8.1.14.1   Input message: queryConditionListRequest

PartName	PartType	Optional	Description
applicationID	xsd:string	No	Id of requestor

8.1.14.2   Output message: queryConditionListResponse

PartName	PartType	Optional	Description
result	xsd:string[1..unbounded]	No	The list of ConditionLists

8.1.14.3   Referenced Faults

ServiceException from 3GPP TS 29.199-01 [4]:

- SVC0001: Service error

PolicyException from 3GPP TS 29.199-01 [4]:

- POL0001: Policy error

8.1.15 Operation: queryActionList

This operation is used to query the list of actionLists which are unattached with any rule.

8.1.15.1 Input message: queryActionListRequest

PartName	PartType	Optional	Description
applicationID	xsd:string	No	Id of requestor

8.1.15.2 Output message: queryActionListResponse

PartName	PartType	Optional	Description
result	xsd:string[1..unbounded]	No	The list of ActionLists.

8.1.15.3 Referenced Faults

ServiceException from 3GPP TS 29.199-01 [4]:

- SVC0001: Service error

PolicyException from 3GPP TS 29.199-01 [4]:

- POL0001: Policy error

8.1.16 Operation: queryActionListInfo

This operation is used to query action information aggregated in the specified actionList. Return value may include the actions.

8.1.16.1 Input message: queryActionListInfoRequest

PartName	PartType	Optional	Description
actionListName	xsd:string	No	The name of the actionList.

8.1.16.2 Output message: queryActionListInfoResponse

PartName	PartType	Optional	Description
result	Action[1..unbounded]	Yes	Actions aggregated in the specified actionList.

8.1.16.3 Referenced Faults

ServiceException from 3GPP TS 29.199-01 [4]:

- SVC0001: Service error

PolicyException from 3GPP TS 29.199-01 [4]:

- POL0001: Policy error

8.1.17 Operation: queryConditionListInfo

This operation is used to query condition information aggregated in the specified conditionList. Return value may include the conditions.

8.1.17.1 Input message: queryConditionListInfoRequest

PartName	PartType	Optional	Description
conditionListName	xsd:string	No	The name of the conditionList.

8.1.17.2 Output message: queryConditionListInfoResponse

PartName	PartType	Optional	Description
result	Condition[1..unbounded]	Yes	Conditions aggregated in the specified conditionList.

8.1.17.3 Referenced Faults

ServiceException from 3GPP TS 29.199-01 [4]:

- SVC0001: Service error

PolicyException from 3GPP TS 29.199-01 [4]:

- POL0001: Policy error

8.1.18   Operation: createSignature

This operation is used to create the new signature in specified domain for evaluation. It includes the name of all inputs which may be used in the request of evaluation and all outputs, relevant policy roles. Name of policy roles are used to select rules relevant to the request. This could be a Null collection and in this case, all of rules in the specified domain may be evaluated. For the request of Evaluation, the operation should assign more than one role. At the evaluation time, evaluatePoilcy operation uses this signature to find out rules associated with the roles.

8.1.18.1   Input message: CreateSignatureRequest

PartName	PartType	Optional	Description
domainName	xsd :string	No	The name of the domain.
signatureName	xsd :string	No	The name of the signature to be created.
roles	xsd :string[0..unbounded]	Yes	More than one role could be assigned to a signature in a domain. The names of roles should be defined when the domain is created.
inputParameters	xsd:string[1..unbounded]	No	The names of input variable sets which are attribute sets defined before.
outputParameters	xsd:string[1..unbounded]	No	The names of output variable sets which are attribute sets defined before.

8.1.18.2   Output message: createSignatureResponse

None

8.1.18.3   Referenced Faults

ServiceException from 3GPP TS 29.199-01 [4]:

- SVC0001: Service error

PolicyException from 3GPP TS 29.199-01 [4]:

- POL0001: Policy error

8.2 Interface: PolicyEvaluation

8.2.1 Operation: evaluatePolicy

This operation is used to request an evaluation of a rule. The signature should be defined before requesting evaluation.

8.2.1.1 Input Message: evaluatePolicyRequest

PartName	PartType	Optional	Description
domainName	xsd :string	No	Name of the domain name
signatureName	xsd :string	No	Name of the signature which is used for request of evaluation
inputVariable	NameValuePair[1..unbounded]	No	An attribute set of one or more input variables that is used for evaluation of the specified rule.

8.2.1.2 Output Message: evaluatePolicyResponse

PartName	PartType	Optional	Description
result	NameValuePair[1..unbounded]	No	An attribute set of one or more output variables.

8.2.1.3 Referenced Faults

ServiceException from 3GPP TS 29.199-01 [4] :

- SVC0001: Service error

PolicyException from 3GPP TS 29.199-01 [4] :

- POL0001: Policy error

8.3 Interface: PolicyEventNotificationManager

8.3.1 Operation: startEventNotification

This operation is used to subscribe for a notification when the event occurs.

8.3.1.1 Input Message: startEventNotificationRequest

PartName	PartType	Optional	Description
reference	Common:SimpleReference	No	Notification endpoint definition
description	xsd:string	Yes	It includes the information of event
eventType	EventType	No	It describes the type of event.
eventName	xsd:string	No	It describes the name of event type
frequency	Common:TimeMetric	Yes	Maximum frequency of notifications(can also be considered minimum time between notifications)
duration	Common:TimeMetric	Yes	Length of time notifications occur for, null to use default notification time defined by service policy
count	xsd:int	Yes	Maximum number of notifications, zero if no maximum

8.3.1.2 Output Message: startEventNotificationResponse

None

8.3.1.3 Referenced Faults

ServiceException from 3GPP TS 29.199-01 [4] :

- SVC0001: Service error

PolicyException from 3GPP TS 29.199-01 [4] :

- POL0001: Policy error

8.3.2 Operation: endEventNotification

This operation is used to request ending a notification

8.3.2.1 Input Message: endEventNotificationRequest

PartName	PartType	Optional	Description
correlator	xsd:string	No	Correlator of request

8.3.2.2 Output Message: endEventNotificationResponse

None

8.3.2.3 Referenced Faults

ServiceException from 3GPP TS 29.199-01 [4] :

- SVC0001: Service error
- SVC0002: Invalid input value

PolicyException from 3GPP TS 29.199-01 [4] :

- POL0001: Policy error

8.4 Interface: PolicyEventNotification

8.4.1 Operation: eventNotification

A notification is delivered to the application with the event information when the monitored policy rule changes.

8.4.1.1 Input Message: eventNotificationRequest

PartName	PartType	Optional	Description
correlator	xsd:string	No	Correlator provided in request to set up this notification
description	xsd:string	No	It describes detailed information about the event.

8.4.1.2 Output Message: eventNotificationResponse

None

8.4.1.3 Referenced Faults

ServiceException from 3GPP TS 29.199-01 [4]:

- SVC0001 - Service error.

- SVC0002 - Invalid input value.

PolicyException from 3GPP TS 29.199-01 [4]:

- POL0001 - Policy error.

9 Fault definitions

There are no service-specific fault definitions for this service.

10 Service policies

Name	Type	Description
MaximumNotificationFrequency	Common:TimeMetric	Maximum rate of notification delivery (also can be considered minimum time between notifications)
MaximumNotificationDuration	Common:TimeMetric	Maximum amount of time a notification may be set up for
DefaultNotificationDuration	Common:TimeMetric	Default amount of time a notification will be set up for
MaximumCount	xsd:int	Maximum number of notifications that may be requested
UnlimitedCountAllowed	xsd:boolean	Allowed to specify unlimited notification count(i.e. specify zero in notification count requested)

Annex A (normative):
WSDL for policy

The document/literal WSDL representation of this interface specification is compliant to the content requirements specified in the present document and is contained in text files (contained in archive 29199-22-800-doclit.zip) which accompanies the present document.

Annex B (informative):
Description of Parlay X Web Services Part 22: Policy for 3GPP2 cdma2000 networks

This annex is intended to define the OSA Parlay X Web Services Stage 3 interface definitions and it provides the complete OSA specifications. It is an extension of OSA Parlay X Web Services specifications capabilities to enable operation in cdma2000 systems environment. They are in alignment with 3GPP2 Stage 1 requirements and Stage 2 architecture defined in:

[1]   3GPP2 X.S0011-D: "cdma2000 Wireless IP Network Standard ", Version 1.1

[2]   3GPP2 S.R0037-0:   "IP Network Architecture Model for cdma2000 Spread Spectrum Systems", Version 3.0

[3]   3GPP2 X.S0013-A: "All-IP Core Network Multimedia Domain"

These requirements are expressed as additions to and/or exclusions from the 3GPP Release 8 specification. The information given here is to be used by developers in 3GPP2 cdma2000 network architecture to interpret the 3GPP OSA specifications.

B.1   General Exceptions

The terms 3GPP and UMTS are not applicable for the cdma2000 family of standards. Nevertheless these terms are used (3GPP TR 21.905 [1]) mostly in the broader sense of "3G Wireless System". If not stated otherwise there are no additions or exclusions required.

CAMEL mappings are not applicable for cdma2000 systems.

B.2   Specific Exceptions

B.2.1   Clause 1: Scope

There are no additions or exclusions.

B.2.2   Clause 2: References

There are no additions or exclusions.

B.2.3   Clause 3: Definitions and abbreviations

There are no additions or exclusions.

B.2.4   Clause 4: Detailed service description

There are no additions or exclusions.

B.2.5   Clause 5: Namespaces

There are no additions or exclusions.

B.2.6 Clause 6: Sequence diagrams

There are no additions or exclusions.

B.2.7 Clause 7: XML Schema data type definition

There are no additions or exclusions.

B.2.8 Clause 8: Web Service interface definition

There are no additions or exclusions.

B.2.9 Clause 9: Fault definitions

There are no additions or exclusions.

B.2.10 Clause 10: Service policies

There are no additions or exclusions.

B.2.11 Annex A (normative): WSDL for policy

There are no additions or exclusions.

Annex C (informative):
Change history

Change history								
Date	**TSG #**	**TSG Doc.**	**CR**	**Rev**	**Subject/Comment**	**Cat**	**Old**	**New**
Nov 2007	CT-38	CP-070715	--	--	Submitted to CT#38 for Information	--	0.0.1	1.0.0
Mar 2008	C5-42	C5-080049	--	--	agreed for CT#40 for Approval	--	1.0.0	2.0.0
May 2008	CT-40	CP-080258	--	--	Submitted to CT#40 for Approval	--	2.0.0	8.0.0

History

Document history		
V8.0.0	January 2009	Publication