VSA API Web Service

User Guide

Kaseya 2008 SP1

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About Kaseya

Kaseya is a global provider of IT automation software for IT Solution Providers and Public and Private Sector IT organizations. Kaseya's IT Automation Framework allows IT Professionals to proactively monitor, manage and maintain distributed IT infrastructure remotely, easily and efficiently with one integrated Web based platform. Kaseya's technology is licensed on over three million machines worldwide.

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VSA API Web Service

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Overview

The VSA API Web Service provides a generalized interface for a client to programmatically interface to the VSA. This API facilitates a client being able to interface a third party package. The API focuses on the following services:

- Connect - This service facilitates the consumer of the API to authenticate and receive a GUID to use throughout the communication. This GUID ages off similarly to how users age off.
- Tickets - This service provides basic facilities for the user to be notified of new tickets. This facility allows users to update fields on a ticket.
- Alarms - This service provides basic facilities for the user to be notified of new alarms and mark an alarms as closed.
- Machines - This service provides a request to collect a set of data about one or more machines.

The VSA API Web Service is based on the Web Services Description Language (WSDL). The WSDL displays in a browser and provides an abstract description of the data being exchanged to and from a web service. A client program connecting to a web service can read the WSDL to determine what functions are available on the server. Any special datatypes used are embedded in the WSDL file in the form of XML Schema. The client can then use SOAP to actually call one of the functions listed in the WSDL.

The following is an example of vsaWS output:

KaseyaWS

Click here for a complete list of operations.

GetMachine

Returns machine detail for the submitted Machine_GroupID.

Test

The test form is only available for requests from the local machine.

SOAP 1.1

The following is a sample SOAP 1.1 request and response. The **placeholders** shown need to be replaced with actual values.

```
POST /vsaWS/kaseyaWS.asmx HTTP/1.1
Host: 192.168.214.224
Content-Type: text/xml; charset=utf-8
Content-Length: length
SOAPAction: "KaseyaWS/GetMachine"

<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  <soap:Body>
    <GetMachine xmlns="KaseyaWS">
      <req>
        <Machine_GroupID>string</Machine_GroupID>
        <SessionID>decimal</SessionID>
      </req>
    </GetMachine>
  </soap:Body>
</soap:Envelope>
```

```
HTTP/1.1 200 OK
Content-Type: text/xml; charset=utf-8
Content-Length: length

<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  <soap:Body>
    <GetMachineResponse xmlns="KaseyaWS">
      <GetMachineResult>
        <Machine_GroupID>string</Machine_GroupID>
        <machName>string</machName>
        <groupName>string</groupName>
        <Manufacturer>string</Manufacturer>
        <ProductName>string</ProductName>
        <MachineVersion>string</MachineVersion>
```

Enabling VSA API Web Service

To enable the VSA API Web Service:

- Display the System > Configure page in the VSA.
- Check the Enable VSA API Web Service checkbox.
- Append the string `/vsaWS/KaseyaWS.asmx` to the VSA URL you are using to display the VSA API Web Service.

Special Fields

The following fields are included in the response to every request.

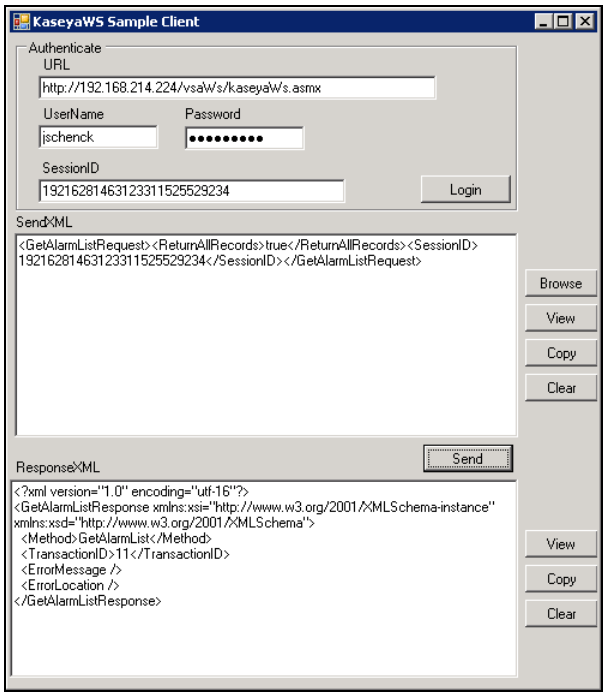
Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

A Session ID is created by the web service and returned to the client the first time a method is invoked by the client. That same session ID must be returned by the client with every method invoked during the session. The SessionID is only valid when received from the same IP address the authentication originates from.

VSA API Web Service Sample Client - C# GUI application

A GUI test client and set of test XMLs are distributed with the VSA API Web Service to help you familiarize yourself with the various API operations. The C# source code for the VSA API Web Service Sample Client is provided to you without restriction. You can use it to see how the client was constructed and incorporate any part of its code into your own application.

Note: An ASP page text client *(page 7)* is also provided.



To run the sample client:

1. Run the sample client located on your KServer:
   `<Install Dir>\vsaWs\TestClient\KaseyaWStestClient.exe`
2. Enter the UserName and Password of a user authorized to connect with the KServer.

   Note: This is the same username and password that an administrator uses to login into the KServer.
3. Click the Login button to display a value in the SessionID field.
4. Click the Browse button to select a test XML file. This populates the SendXML textbox with the text of the XML file.

   Note: You do not have to enter a value between the <SessionID> element tags of the test XML message. The Sample Client automatically inserts the displayed SessionID into any XML message when you click the Send button.
5. Click the Send button to send the XML message to the target URL. A response XML message displays in the ResponseXML textbox.

VSA API Web Service Sample Client - ASP Page

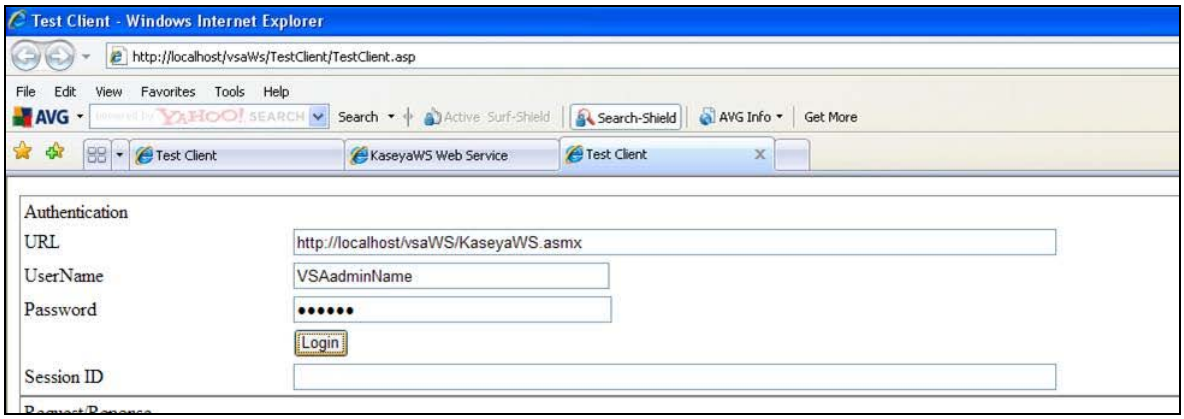
A test client ASP page is also distributed with the VSA API Web Service to help you familiarize yourself with the various API operations. You can use it to see how the ASP client was constructed and incorporate any part of its code into your own application. Users can browse to the actual `/vsaWS/KaseyaWS.asmx` page *of any Kserver*, select a web method and copy and paste the exact XML SOAP request structure specified in the WSDL.

Authentication is in its own frame at the top of the page. The sessionID from a successful authentication is exposed and can be copied and pasted in subsequent XML requests.

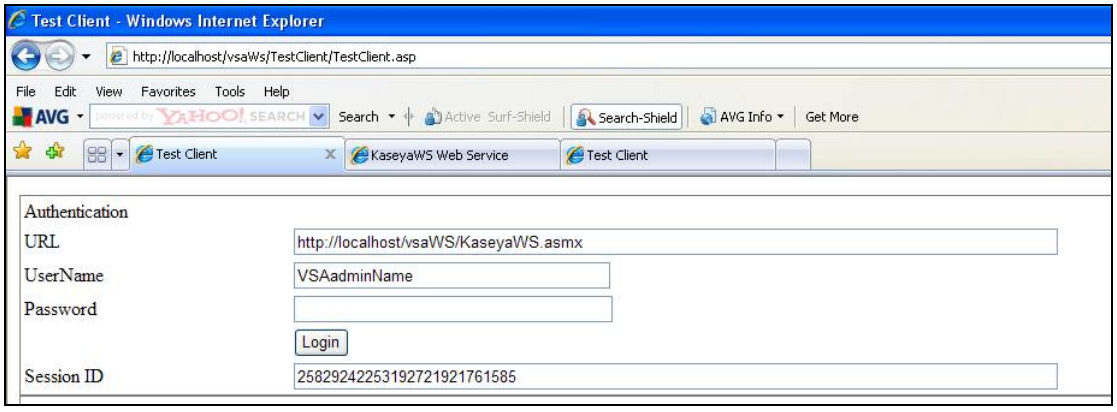
Note: This page does not automatically incorporate the displayed sessionID into subsequent request statements like the C# GUI Test Client *(page 6)* does.

Example 1: Authentication

1. Enter a valid VSA administrator UserName and Password and click Login.

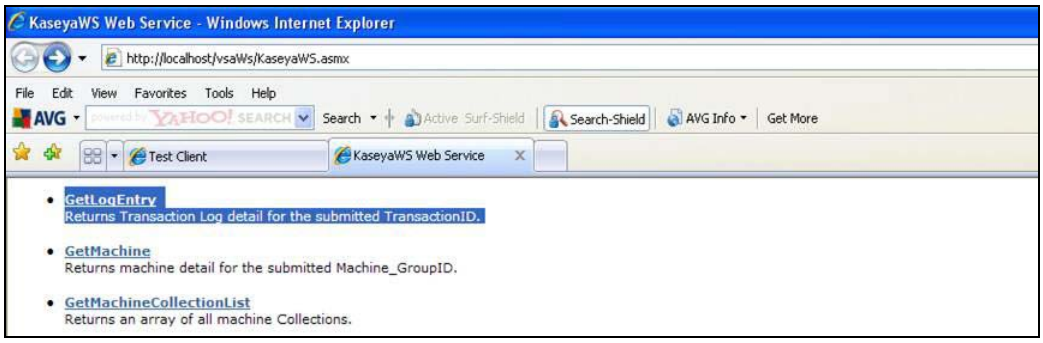


The Session ID textbox is populated with the session ID generated by your logon. You will need to copy and paste this session ID into subsequent XML requests.

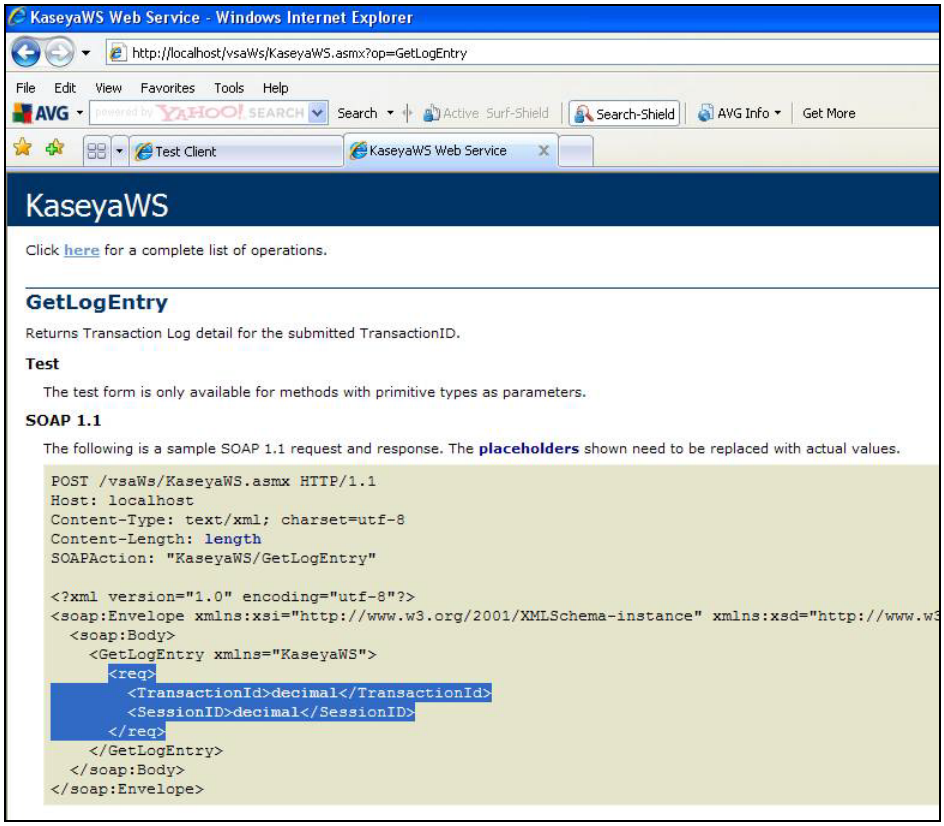


Example 2 - Creating a Get Request

1. In a second browser window, use the `/vsaWS/KaseyaWS.asmx` page to select a method, such as GetLogEntry.

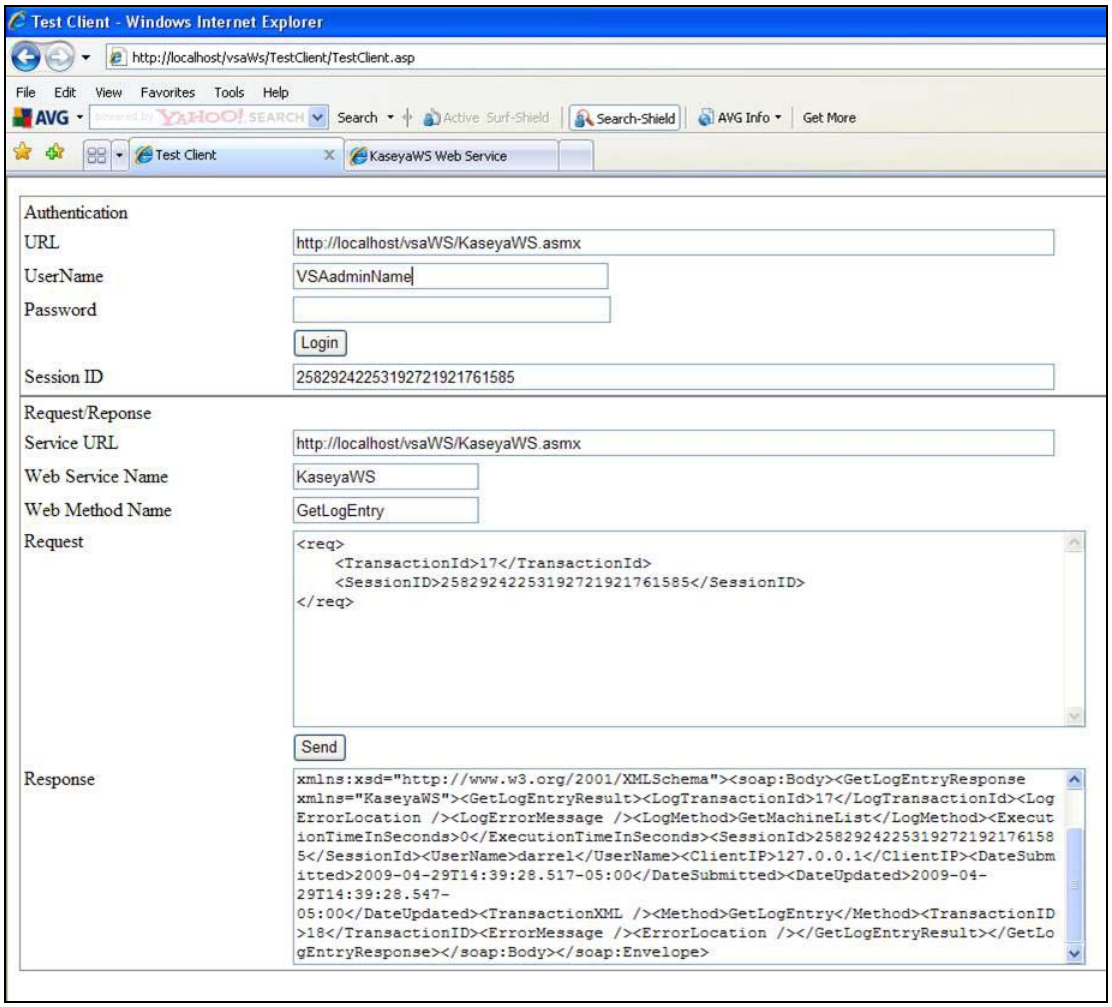


2. Each method displays the XML SOAP structure for that method's request. Copy just the portion of the method's request structure that starts with `<req>` and ends with `</req>`.



3. Paste the request structure into the Request pane of the `TestClient.asp` page. Enter the name of the method in the Web Method Name field. Replace the placeholder `decimal` with the `sessionID` string you obtained during authentication. Replace any other placeholder content with valid data as required. Then click the Send button.

> Note: The `<BrowserIP></BrowserIP>` element in any method can be ignored. The `<BrowserIP>` element helps to provide single-signon coordination with the VSA, and can be ignored in a testing environment where single-signon is not the focus.



The results display in the Response pane.

VSA API Web Service Security

General

The VSA API Web Service is accessible, by default, from any IP address in the world using any valid VSA administrator credentials. In this default configuration, valid username /password combinations are considered for authentication originating from any machine.

In any configuration, the `hash.dll` provided by the VSA must be used to encrypt the password for submission. Implementation details for the `hash.dll` are contained in the sample source code provided.

Once a successful Authentication request issues a SessionID, this SessionID must be submitted with every service invocation, and is only valid when received from the IP address it was issued to. The issued SessionID expires after a period of inactivity.

Security can be enhanced by preparing and deploying an `AccesRules.xml` file. This file is used by the VSA API Web Service to define access rules based on the IP addresses requests are received from. IP filtering is a mechanism commonly used in business-to-business systems to ensure that requests are honored only from the partner's servers.

The `AccesRules.xml` file is divided into three sections:

- Default Access Rules
- IP Ranges
- User Mapping

> Note: 127.0.0.1 (localhost) always has access for any account, regardless of configuration.

XML Structure

```
<AccessRules>
   <DefaultAccessRules>
          <GrantAnyIPToUndefinedUsers/>
          <GrantAllIPRangesToUndefinedUsers/>
          <DenyAccessToUndefinedUsers/>
   </DefaultAccessRules>
   <IPRanges>
          <IPRange RangeID="" FromIPAddress="" ToIPAddress="" RangeDescription=""/>
          <IPRange RangeID="" FromIPAddress="" ToIPAddress="" RangeDescription=""/>
   </IPRanges>
   <UserMapping>
          <User UserName="" RangeID="" GrantAllRanges="" GrantAnyIP="" DenyAccess=""/>
          <User UserName="" RangeID="" GrantAllRanges="" GrantAnyIP="" DenyAccess=""/>
   </UserMapping>
</AccessRules>
```

Default Access Rules

The elements in this section define the access rules for those accounts that are not specifically addressed in the User Mapping section.

`<GrantAnyIPToUndefinedUsers/> true/false`

true: Any user not in UserMapping gets access from any IP address.

`<GrantAllIPRangesToUndefinedUsers/> true/false`

true: Any user not in UserMapping gets access from any IP address contained in IPRanges.

`<DenyAccessToUndefinedUsers/> true/false`

true: Any user not in UserMapping denied access.

IP Ranges

This section is used to define specific machines, or ranges of machines, by IP, that are used to assign user access.

`RangeID="integer"`

An arbitrary, user assigned integer used to refer to the Range in UserMapping.

`FromIPAddress="string"`

Starting IP address, inclusive. First three positions of the quartet must match ToIPAddress.

`ToIPAddress=" string"`

Ending IP address, inclusive. First three positions of the quartet must match FromIPAddress.

`RangeDescription=" string"`

Description of the IP Range. For example: “Production Servers”.

User Mapping

`UserName="string"`

The VSA Admin name. The VSA API Web Service uses the same credentials and password encryption as VSA. So, if you change your password in VSA, be sure to change it in your VSA API Web Service client implementation, as well.

`RangeID="integer"`

Used to point to a defined IP Range in the IP Ranges section. A user can have multiple UserMapping elements to express all the IP Ranges he has access from. Not used when one of the Grant / Deny attributes below are used.

`GrantAllRanges="true/false"`

true: User has access from any range defined in the IP Ranges section.

`GrantAnyIP=" true/false"`

true: User has access from any IP address.

`DenyAccess=" true/false"`

true: User has no access at all.

Sample Access Configuration XML

```
<AccessRules>
   <DefaultAccessRules>
          <GrantAnyIPToUndefinedUsers>false</GrantAnyIPToUndefinedUsers>
          <GrantAllIPRangesToUndefinedUsers>false</GrantAllIPRangesToUndefinedUsers>
          <DenyAccessToUndefinedUsers>true</DenyAccessToUndefinedUsers>
   </DefaultAccessRules>
   <IPRanges>
          <IPRange RangeID="1" FromIPAddress="192.168.214.01" ToIPAddress="192.168.214.10"
RangeDescription="Partner X Production Web Farm"/>
          <IPRange RangeID="2" FromIPAddress="192.168.15.102" ToIPAddress="192.168.15.102"
RangeDescription="Senior Developer Machine"/>
          <IPRange RangeID="3" FromIPAddress="192.168.15.105" ToIPAddress="192.168.15.109"
RangeDescription="Sales Demo Machines"/>
          <IPRange RangeID="4" FromIPAddress="192.168.210.35" ToIPAddress="192.168.210.35"
RangeDescription="Interal QA Machine"/>
   </IPRanges>
   <UserMapping>
          <User UserName="B2BMasterAdmin" RangeID="1" GrantAllRanges="false"
GrantAnyIP="false" DenyAccess="false"/>
          <User UserName="DevTestAccount" RangeID="2" GrantAllRanges="false"
GrantAnyIP="false" DenyAccess="false"/>
          <User UserName="SalesTestAccount" RangeID="3" GrantAllRanges="false"
GrantAnyIP="false" DenyAccess="false"/>
          <User UserName="SalesTestAccount2" RangeID="3" GrantAllRanges="false"
GrantAnyIP="false" DenyAccess="false"/>
          <User UserName="QAMasterAdmin" RangeID="4" GrantAllRanges="false"
GrantAnyIP="false" DenyAccess="false"/>
          <User UserName="SalesTravellingTestAccount" RangeID="" GrantAllRanges="false"
GrantAnyIP="true" DenyAccess="false"/>
          <User UserName="Bob" RangeID="" GrantAllRanges="true" GrantAnyIP="false"
DenyAccess="false"/>
          <User UserName="Sally" RangeID="" GrantAllRanges="false" GrantAnyIP="false"
DenyAccess="true"/>
```

```
    </UserMapping>
</AccessRules>
```

Web Links - Inbound and Outbound

Aside from API operations described later in the document, the KServer also supports the following inbound and outbound links:

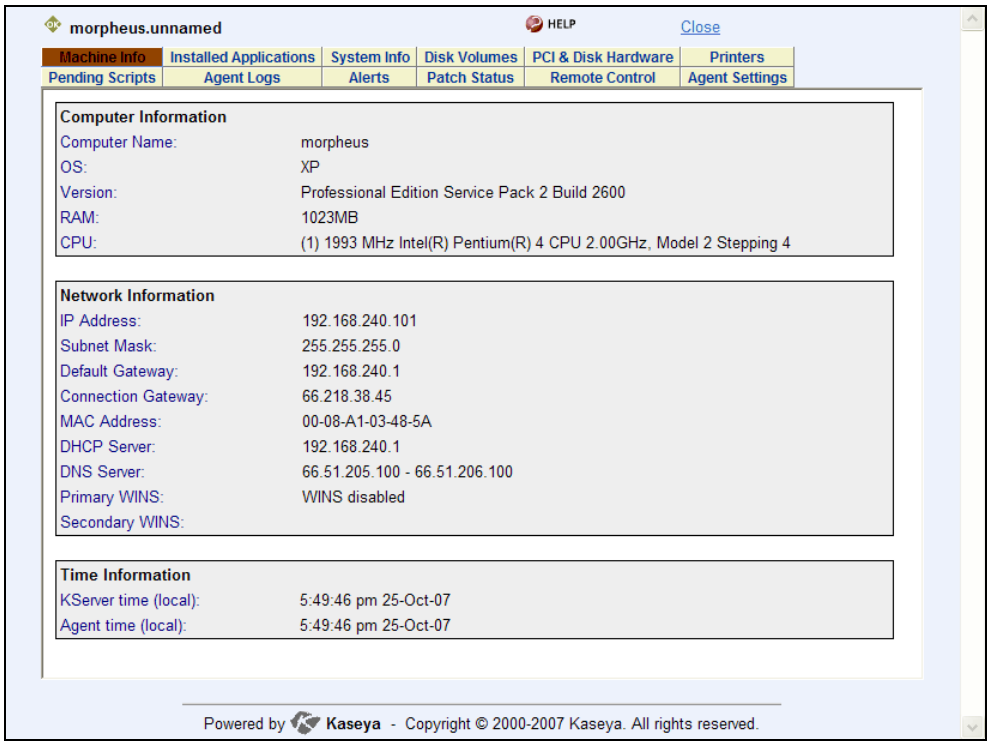
Inbound

The URL to display the Machine Summary web page for a specific machine ID is:

`http//....?machName=<MachineID>`

For example:

http://demo.kaseya.com?machName=jconners.acme

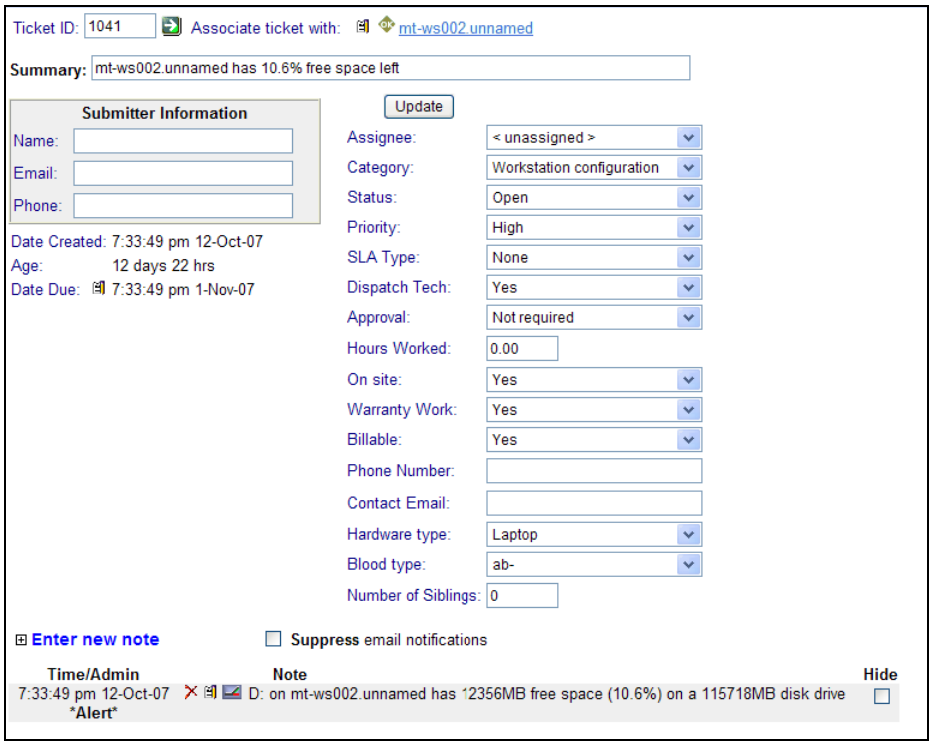


The URL to display the Ticket web page for a specific ticket ID is:

Error! Hyperlink reference not valid.>

For example:

http://demo.kaseya.com?ticid=1234



Outbound

To customize the New Ticket link on the Machine Summary page fill out the `externalLink.xml` file as described in the comments section of the XML below. To activate the new ticket link, place the `externalLink.xml` file in the `\WebPages\install\` directory of your KServer.

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
<externalLinks>
  <!--
  URL STRING SUBSTITUTIONS: The URL string displayed is associated
  with a particular machine ID. The string is searched for the following
  case sensitive values and substituted for the values below.
  machineNameVal - the machine name for the active machine is substituted
                   in the URL string.
  groupNameVal - the group name for the active group.
  -->
  <ticketLink displayName="Ext Ticket"
url="http://192.168.212.52/?mname=machineNameVal&amp;gname=groupNameVal"/>
</externalLinks>
```

Operations

The following operations can be performed using the VSA API Web Service.

Admin Group Access

Assigns a machine group to an administrator role.

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

Authenticate

Required to begin the VSA API Web Service session. The SessionID returned must be submitted with every method invoked during session. The SessionID is only valid when received from the same machine the authentication originates from.

A single record of the following fields is returned.

SessionID	decimal	The unique session ID assigned to a user connection with the target URL.
Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

Automatic Logon During Authentication

When you authenticate through the API, you are automatically logged into VSA as well. If you are already logged into the VSA at authentication time, the 2 sessions are synchronized. Either way, the result is the same – you end up with valid sessions in both worlds.

The VSA looks for the API's 26 digit SessionID on the query string of every VSA page. So, if the application developer needs to redirect to a VSA page, he can now get directly to a page without forcing the user to log in again. The syntax is:

```
URL?apiLogonGuid=12345678901234567890123456
```

For example:

```
http://someServer:123/Systemtab/SomePage?apiLogonGuid=12345678901234567890123456&SomeVar=SomeValue
```

API activity keeps the VSA session alive. However, since VSA does not assume there is always a need for an API session, VSA activity does not keep the API session alive.

The API uses the same timeout value as the VSA, which is maintained using the VSA's System > Logon Policy page, and has a system default value of 30 minutes.

CloseAlarm

Closes the alarm for the submitted MonitorAlarmID.

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.

ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

CreateAdmin

Creates a standard administrator. The password must be hashed.

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

CreateAgentInstallPackage

Creates an agent installation package.

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

CreateMachineGroup

Creates a machine group.

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

CreateRole

Creates an administrator role.

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

DeleteAdmin

Deletes the specified administrator.

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

DeleteAgent

Deletes the agent on the target machine and corresponding machine ID account in the VSA.

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

DeleteMachineGroup

Deletes the specified machine group.

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

DeleteRole

Deletes the specified administrator role.

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

DisableAdmin

Disables a specified administrator.

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.

ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

Echo

Test method for connectivity test and benchmarking. Does not require authentication. Returns the submitted string.

A single record of the following field is returned.

EchoResult	string	This value should match the input included in the request.

EnableAdmin

Enables a specified administrator.

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

GetAlarm

Returns alarm detail for the submitted MonitorAlarmID.

A single record of the following fields is returned.

Machine_GroupID	string	A concatenated representation of the machine id and the group ID it is associated with
agentGuid	decimal	A globally unique identifier for a machine ID.group ID account and its corresponding agent.
MachineName	string	Machine Name used for each agent
GroupName	string	Group Name used for each agent
MonitorAlarmID	int	unique monitor alarm number
MonitorType	int	0=Counter 1=Service 2=Process 3=SNMP 4=Alert 5=System Check 6=EPS
AlarmType	string	0 -> Alarm 1 -> Trending
Message	string	Message created from alarm, email message body
AlarmSubject	string	Subject of alarm and email subject
AlarmEmail	string	Email Address(es) alarm is sent to
EventTime	string	Date and Time of alarm
TicketID	int	Ticket ID created from alarm

AdminName	string	Administrator who assigned monitor counter to machine
MonitorName	string	Name of monitor SNMP Get object
LogType		1 -> Application Log 2 -> Security Log 3 -> System Log
EventType	int	1 -> Error 2 -> Warning 4 -> Informational 8 -> Success Audit 16 -> Failure Audit
LogValue	decimal	Value causing alarm, if the return value of the SNMP Object Get command is a string the value will be the the Message
SNMPName	string	Name returned from SNMP Device on scan
SNMPCustomerName	string	Custom name for SNMP Device
SystemCheckParam1	string	First parameter used in system check
SystemCheckParam2	string	(Optional) Second parameter used by system check
Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

GetAlarmList

Returns an array of new alarms added since last request by default. Returns all alarms when ReturnAllRecords is set to true.

Multiple records of the following fields are returned, if applicable.

Machine_GroupID	string	A concatenated representation of the machine id and the group id it is associated with
agentGuid	decimal	A globally unique identifier for a machine ID.group ID account and its corresponding agent.
MonitorAlarmID	int	unique monitor alarm number

AlertType	int	1 -> Admin account disabled 2 -> Get File change alert 3 -> New Agent checked in for the first time 4 -> Application has been installed or deleted 5 -> Script failure detected 6 -> NT Event Log error detected 7 -> KServer stopped 8 -> Protection violation detected. 9 -> PCI configuration has been changed 10 -> Disk drive configuration change 11 -> RAM size changed. 12 -> Test email sent by serverInfo.asp 13 -> Scheduled report completed 14 -> LAN Watch alert type 15 -> agent offline 16 -> low on disk space 17 -> disabled remote control 18 -> agent online 19 -> new patch found 20 -> patch path missing 21 -> patch install failed 23 -> Backup Alert
AlarmSubject	string	Subject of alarm and email subject
EventTime	dateTime	Date and time of alarm

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

GetGroupLicenseInfo

Gets the allowed number of seats for the specified group.

A single record of the following fields is returned.

MaxAgents	int	The maximum number of agents that can be installed for this machine group.
Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

GetLogEntry

Returns transaction log detail for the submitted TransactionID.

A single record of the following fields is returned.

LogTransactionId	decimal	The log transactionID.

LogErrorLocation	string	The log error location.
LogErrorMessage	string	The log error message.
LogMethod	string	The log operation that requested a response.
ExecutionTimeInSeconds	decimal	The log time required to respond to the request.
SessionId	decimal	The log session ID.
UserName	string	The log user name.
ClientIP	string	The log IP address of the client.
DateSubmitted	dateTime	The log date and time the request was submitted.
DateUpdated	dateTime	The log date and time the response was returned.
TransactionXML	string	The XML message used to submit the request.
Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

GetMachine

Returns machine detail for the submitted Machine_GroupID.

A single record of the following fields is returned.

Machine_GroupID	string	A concatenated representation of the machine id and the group id it is associated with.
agentGuid	decimal	A globally unique identifier for a machine ID.group ID account and its corresponding agent.
machName	string	full machine name. Everything to the left of the left most decimal point is the machine name.
groupName	string	full group name for this account. Everything to the right of the left most decimal point is the group name.
Manufacturer	string	Manufacturer string (type 1)
ProductName	string	Product Name string (type 1)
MachineVersion	string	Version string (type 1)
SysSerialNumber	string	Serial Number string (type 1)
ChassisSerialNumber	string	Chassis Serial Number (type 3)
ChassisAssetTag	string	Chassis Asset Tag number (type 3)
BusSpeed	string	External Bus Speed (in MHz) (type 4)
MaxMemorySize	string	Maximum Memory Module Size (in MB) (type 16 - Maximum Capacity or if type 16 not available, Maximum Memory Module Size type 5)
MaxMemorySlots	string	Number of Associated Memory Slots (Number of Memory Devices in type 16 or if type 16 not available Number of Associated Memory Slots in type 5)
ChassisManufacturer	string	Chassis Manufacturer (type 3)
ChassisType	string	Chassis Type (type 3)
ChassisVersion	string	Chassis Ver (type 3)
MotherboardManufacturer	string	Motherboard Manufacturer (type 2)
MotherboardProductCode	string	Motherboard Product Code (type 2)

MotherboardVersion	string	Motherboard Version (type 2)
MotherboardSerialNumber	string	Motherboard Serial Number (type 2)
ComputerName	string	Name of the Computer
IpAddress	string	IP Address of the computer in a.b.c.d notation
SubnetMask	string	Subnet mask in a.b.c.d notation. String is empty if data is unavailable
DefaultGateway	string	Default gateway IP address in a.b.c.d notation. String is empty if data is unavailable.
DnsServer1	string	DNS server #1s IP address in a.b.c.d notation. String is empty if data is unavailable.
DnsServer2	string	DNS server #2s IP address in a.b.c.d notation. String is empty if data is unavailable.
DnsServer3	string	DNS server #3s IP address in a.b.c.d notation. String is empty if data is unavailable.
DnsServer4	string	DNS server #4s IP address in a.b.c.d notation. String is empty if data is unavailable.
DhcpEnabled	int	0 -> Data is unavailable, 1 -> DHCP on client computer is enabled, 2 -> Disabled
DhcpServer	string	DHCP servers IP address in a.b.c.d notation. String is empty if data is unavailable.
WinsEnabled	string	0 -> Data is unavailable, 1 -> WINS resolution on client computer is enabled, 2 -> Disabled
PrimaryWinsServer	string	Primary WINS servers IP address in a.b.c.d notation. String is empty if unavailable.
SecondaryWinsServer	int	Secondary WINS servers IP address in a.b.c.d notation. String is empty if unavailable.
ConnectionGatewayIp	int	IP Address in a.b.c.d notation obtained by the Kserver as the source address of the Agent. This IP is the Agents network gateway and will be different from the IpAddress if the computer is behind NAT for example. String is empty if unavailable.
OsType	string	String contains OS type, such as 95, 98, NT4, 2000, NT3.51, or WIN32s. Derived from portions of MajorVersion, MinorVersion, and PlatformId.
OsInfo	string	String contains additional OS info, such as Build 1381 Service Pack 3. Derived from portions of BuildNumber and CsdVersion.
MajorVersion	decimal	Major version number from GetVersionEx() Windows function call.
MinorVersion	string	Minor version number from GetVersionEx() Windows function call.If PlatformId is Win32 for Windows, then a 0 MinorVersion indicates Windows 95. If PlatformId is Win32 for Windows, then then a MinorVersion > 0 indicates Windows 98.
MacAddr	string	String containing the physical address, i.e. the Media Access Control address, of the connection. A MAC address has the form of: 00-03-47-12-65-77
LoginName	string	User name of the currently logged on user. This value is updated with every quick check in. The agent error log file is updated with each change.
firstCheckin	dateTime	timestamp recording the first time this agent checked into the system
lastCheckin	dateTime	timestamp recording the most recent time this agent checked into the system

currentUser	string	login name of the currently logged in user. Blank if no one logged in at this time
lastLoginName	string	login name of the last user to log into this system
lastReboot	dateTime	timestamp when this system was last rebooted
agentVersion	int	version number of agent installed on this system
contactName	string	User contact name assigned to this agent
contactEmail	string	User email address assigned to this agent
contactPhone	string	User email address assigned to this agent
contactNotes	string	Notes associated with the contact information for this agent
enableTickets	int	0 if this user does not have access to ticketing through the user interface
enableRemoteControl	int	0 if this user does not have access to remote control through the user interface
enableChat	int	0 if this user does not have access to chat through the user interface
credentialName	string	The username of the credential set for this agent (if any)
primaryKServer	string	address:port agent connects to for its primary kserver connection
secondaryKServer	string	address:port agent connects to for its secondary kserver connection
quickCheckinSecs	int	the time to wait, in secs, before performing another agent quick check-in
agentTempDir	string	The temp directory used by the agent on this system

Multiple records of the following fields are returned, if applicable.

CpuDesc	string	CPU description (e.g. Pentium III Model 8)
CpuSpeed	int	CPU speed in MHz (e.g. 601)
CpuCount	int	Number of processors (e.g. 1)
TotalRam	int	Amount of RAM in MBytes (e.g. 250)

Multiple records of the following fields are returned, if applicable.

DriveLetter	string	Logical disk drive letter (e.g. C)
TotalSpace	int	Total MBytes on the disk (e.g. 28609 for 28.609 GB) May be null if unavailable.
UsedSpace	int	Number of MBytes used (e.g. 21406 for 21.406 GB). May be null if unavailable.
FreeSpace	int	Number of MBytes free (e.g. 21406 for 21.406 GB). May be null if unavailable.
DriveType	string	Fixed = hard diskRemovable = floppy or other removable mediaCDROMNetwork = mapped network drive
VolumeName	string	Name assigned to the volume
FormatType	string	NTFS, FAT32, CDFS, etc.

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

GetMachineCollectionList

Returns an array of all machine collections. Items returned can be used as arguments on GetMachineList to filter output.

Multiple records of the following field are returned, if applicable.

collectionName	string	The name of the collection.

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

GetMachineGroupList

Returns an array of all MachineGroups the authenticated account has privileges to see. Items returned can be used as arguments on GetMachineList to filter output.

Multiple records of the following field are returned, if applicable.

groupName	string	The machine group ID.

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

GetNotesList

Returns an array of new ticket notes added since last request.

Multiple records of the following fields are returned, if applicable.

TicketID	int	The ticket ID.
Author	string	The author of the note.
DateEntered	dateTime	The date the note was created or last modified.
NoteText	string	The text of the note.

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

GetMachineList

Returns an array of all the machines that the authenticated administrator has access rights to see. Supports optional filtering of the return by submitted MachineGroup or MachineCollection. Multiple records of the following fields are returned, if applicable.

Multiple records of the following fields are returned, if applicable.

MachineGroupID	string	A currently existing Machine group. If this field is left blank all machines will be returned.
IpAddress	string	the IP address of the agent machine
MacAddr	string	the MAC address of the agent machine
groupName	string	Group Name used for each agent
firstCheckin	datetime	the first time an agent checks into the VSA
agentGuid	decimal	A globally unique identifier for a machine ID.group ID account and its corresponding agent.

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

GetPackageURLs

Gets a list of all agent deploy package URLs available to the logged on user.

Multiple records of the following fields are returned, if applicable.

URL	string	The URL.
PackageName	string	The agent deploy package name.
Description	string	The description of the agent deploy package.

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

GetTicket

Returns ticket detail for the submitted MonitorTicketID.

TicketID	int	unique trouble ticket ID number
Machine_GroupID	string	A concatenated representation of the machine id and the group id it is associated with.
agentGuid	decimal	A globally unique identifier for a machine ID.group ID account and its corresponding agent.
machName	string	Machine Name used for each agent
groupName	string	Group Name used for each agent
TicketSummary	string	summary string briefly describing the ticket
Assignee	string	Admin name this ticket is assigned to
CreatedBy	string	admin name (or machine ID if entered by user) of the person that created this ticket
CreationDate	string	timestamp when the ticket was created

DueDate	string	ticket due date
LastModifiedDate	string	Date of the most recent note entered for this ticket
ResolutionDate	string	timestamp when the ticket was closed
UserName	string	The name of the submitter
UserEmail	string	The email address of the submitter
UserPhone	string	The phone number of the submitter

Multiple records of the following fields are returned, if applicable.

TicketLabel	string	The label of the field
IntegerValue	int	The value of a integer field
NumberValue	decimal	The value of a number field
StringValue	string	The value of a string field
ListValue	string	The value of a list field

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

GetTicketList

Returns an array of new tickets added since last request by default. Returns all tickets when ReturnAllRecords is set to true.

Multiple records of the following fields are returned, if applicable.

TicketID	int	unique trouble ticket ID number
Machine_GroupID	string	A concatenated representation of the machine id and the group id it is associated with.
agentGuid	decimal	A globally unique identifier for a machine ID.group ID account and its corresponding agent.
TicketSummary	string	summary string briefly describing the ticket

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

GetTicketNotes

Returns an array of notes belonging to the submitted ticket.

Multiple records of the following fields are returned, if applicable.

TicketID	int	The ticket ID.
Author	string	The author of the note.
DateEntered	dateTime	The date the note was created or last modified.

NoteText	string	The text of the note.

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

LockFunctionAccess

Locks function access of the submitted administrator role to the submitted base administrator role.

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

Primitives

The following primitive Datatype operations are also provided. Each primitive operation uses the same xml contract as their corresponding multiple-columns operation. Each primitive returns a string value that requires subsequent processing.

Primitive	Result	Datatype
PrimitiveAuthenticate	PrimitiveAuthenticateResult	string
PrimitiveCloseAlarm	PrimitiveCloseAlarmResult	string
PrimitiveDeleteMachineGroup	PrimitiveDeleteMachineGroupResult	string
PrimitiveGetAlarmList	PrimitiveGetAlarmResult	string
PrimitiveGetLogEntry	PrimitiveGetLogEntryResult	string
PrimitiveGetMachine	PrimitiveGetMachineResult	string
PrimitiveGetMachineCollectionList	PrimitiveGetMachineCollectionListResult	string
PrimitiveGetMachineGroupList	PrimitiveGetMachineGroupListResult	string
PrimitiveGetMachineList	PrimitiveGetMachineListResult	string
PrimitiveGetNotesList	PrimitiveGetNotesListResult	string
PrimitiveGetTicket	PrimitiveGetTicketResult	string
PrimitiveGetTicketList	PrimitiveGetTicketListResult	string
PrimitiveGetTicketNotes	PrimitiveGetTicketNotesResult	string
PrimitiveUpdateTicket	PrimitiveUpdateTicketResult	string

RoleMembership

Assigns an administrator to an administrator role.

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

SendAdminMessage

Send a message to an administrator.

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

SetAdminPassword

Resets the password for a specified administrator.

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

SetGroupLicenseInfo

Sets the maximum number of agents allowed for a specified group.

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

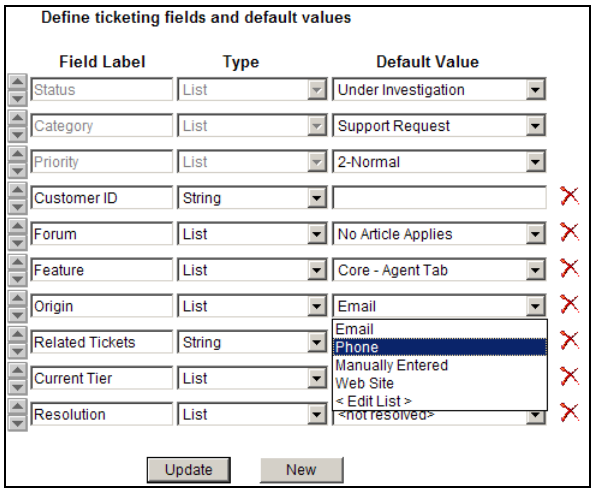
UpdateTicket

Updates one or more fields of a ticket. Only fields listed on the Ticketing > Email Reader page can be updated.

Updating List Fields

In the example below the `Origin` field is a `List` type field with four possible values. A request passes the name of the field, `Origin`, and a number representing the position of the value in the list, *counting from 1*. For example, the value `Phone` is in the second position in the list, so the value passed to change the `Origin` field to `Phone` is `2`.

Warning: Changing the order of field drop-down list values by re-sequencing them or by entering a new value in the middle of the list will change the value selected by the UpdateTicket operation. Ensure administrators are aware of this integration constraint before changes are made to Email Reader field values.



Closing a Ticket

Updating a ticket can include closing a submitted MonitorTicketID by updating the Status field with a value of 3, which represents the third value in the Status field drop-down list. An example is shown below. Additional <TicketField> name/value elements could be added to the example below to update multiple fields.

```
<UpdateTicketRequest>
   <TicketID>1</TicketID>
   <TicketFields>
          <TicketField>
                 <Name>Status</Name>
                 <Value>3</Value>
          </TicketField>
   </TicketFields>
   <SessionID>136421462361942472441812221</SessionID>
</UpdateTicketRequest>
```

Updating Other Types of Fields

The following other types of ticket fields can be updated:

- `String` - Can contain any text up to 500 characters in length. Best used to hold things like problem location or other variables that do not belong in the summary line.
- `Integer` - Can contain any positive or negative integer value.
- `Number (nn.d)` - A number that always shows one digit to the right of the decimal point.
- `Number (nn.dd)` - A number that always shows two digits to the right of the decimal point.
- `Number (nn.ddd)`- A number that always shows three digits to the right of the decimal point.
- `Number (nn.dddd)` - A number that always shows four digits to the right of the decimal point.

Returned Fields

A single record of the following fields is returned.

Method	string	The operation that requested this response.
TransactionID	decimal	The unique message ID for this message.
ErrorMessage	string	If blank, no error was returned.
ErrorLocation	string	If blank, no error was returned.

Ticket Attachments

The VSA API Web Service cannot be used to get or update ticket file attachments. Ticket file attachments are typically located in `C:\Kaseya\WebPages\ManagedFiles` directory of the KServer. API developers are responsible for writing code to place attachment files in this directory before making Web Service API calls that reference these attachments.