

# EMS API Guide

V44.1

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## CHAPTER 1: EMS API

This EMS API Guide provides information regarding special EMS customizations available to System Administration and IT users once EMS has been installed and set up.

**Important!**

Update 9 introduced the new EMS Platform Services API. See Also: [Install EMS Platform Services](#).

The following topics are covered in the EMS API Guide:

- [Introduction to EMS APIs](#)
  - [EMS API Process Overview](#)
  - [Technical Benefits](#)
- [Hardware and Software Requirements](#)
- [EMS API Requirements and Licensing](#)
- [Obtain EMS API Web Service Installation Files](#)
- [Install or Upgrade Database Components](#)
- [Install or Upgrade EMS API Web Service](#)
- [Configure and Verify EMS for EMS API Web Service Use](#)
- [EMS API Functions](#)
  - [ADD Operations](#)
  - [AUTOCHECKIN Operations](#)
  - [DELETE Operations](#)
  - [GET Operations](#)
  - [UPDATE Operations](#)
  - [VALIDATE Operations](#)

## CHAPTER 2: EMS API Process Overview

To use EMS APIs, you will need to do the following:

- [Obtain and Install Database Components](#)
- [Install the EMS API Web Service](#)
- [Configure and Verify EMS for EMS API Web Service Use](#)
- [Work with the API Functions](#)

## CHAPTER 3: Technical Benefits

A leading management consulting firm with over 250,000 employees has used EMS for more than 10 years to schedule and manage Classrooms, Lobby Areas, Meeting and Conference Rooms, Hot Desks, Parking Spaces and Video Conference Rooms. Their EMS implementation manages 330 customer buildings around the world, comprising 33,095 rooms and hot-desks. In 2011, the number of bookings scheduled was 2,234,086.

There is no limit on the amount of data you can pull through the API. The EMS API provides numerous call filters so you can request an efficient and targeted set of data. This helps reduce the workload on the EMS system. It also improves the performance of your solution, so no extraneous data is processed.

EMS APIs provide infinite configurability by enabling you to completely customize your API calls and returns.

### EventTypes and StatusTypes

You define your organization's EventTypes and Statuses; you can retrieve a list of these calls using the GetEventTypes and GetStatusTypes calls. Status types, for example, are as follows:

- **Booked Space**—the room is taken out of inventory and cannot be reserved by another booking. (The system prevents the space from being double-booked.)
- **Cancel**—booking information is retained, but the room is released back into inventory
- **Info Only**—Booking information is retained, but the space is not taken out of inventory
- **Wait**—booking information is retained in case the space becomes available prior to the event date

StatusTypeIDs are as follows: -14 = Booked Space, -11 = Info Only, -13 = Wait, -12 = Cancel

### DisplayOnWeb

The GetEventTypes and GetStatuses calls above both return a field called DisplayOnWeb. You set this field when defining a new EventType or a new Status, to either Yes or No. DisplayOnWeb is the field used in EMS web interfaces, including EMS Web App and EMS Kiosk, to determine whether to display an event. Taken one step further, you can also determine which EventTypes and Statuses may be displayed (DisplayOnWeb=Yes). You can use those EventTypes and Statuses as filters on some GetBooking calls; the result is you see just the booking data needed, rather than pulling in all data and then discarding a long list of bookings.

## CHAPTER 4: Hardware and Software Requirements

### Database Server Requirements

Compatibility Level	Version	DB Compatibility
110	Microsoft SQL Server 2012 = 11.00.XXXX	110
120	Microsoft SQL Server 2014 = 12.00.XXXX	110 (avoid CL for 2014)
130	Microsoft SQL Server 2016 = 13.00.XXXX	130

**Important!**

2017 is not yet officially supported by EMS Software.

### EMS Desktop Client Requirements

**Operating System**

Windows 7 (32-bit and 64-bit)

Windows 8 (32-bit and 64-bit)

Windows 8.1 (32-bit and 64-bit)

Windows 10 (32-bit and 64-bit)

.NET Framework 4.6.1

## CHAPTER 5: EMS API Requirements and Licensing

The EMS API allows other platforms (or applications) a conduit for access to the data contained in EMS. This may include reading data *from* or sending data to the EMS database. The EMS API is commonly connected to another API or database via integration point, or 'hook', usually a third party application or web service. EMS Software does not provide this additional component (or offer support) to create the connection from the external application to the EMS API, as we are an open framework to it.

### EMS API Requirements

The latest version of EMS must be installed, plus additional requirements and prerequisites for each EMS Component you want to interact with via API. See [EMS V44.1 System Requirements](#).

### EMS API Licensing

The Basic API and the Advanced API are both optional system features that may be licensed by EMS customers. Note that the Advanced API includes the Basic API.

The Advanced API provides all of the calls to pull data (i.e. "get" calls) from the EMS database. Calls to update or add reservations/bookings (i.e. "update" and "add" calls) also require the Advanced API. If you are unsure whether or not your organization is licensed for the API, or if you would like to learn more, please contact your Account Executive.

## CHAPTER 6: Obtain EMS API Web Service Installation Files

Please contact your Professional Services Consultant or Customer Support to obtain the following components:

- **EMS API (EMSAPI.msi)**—Installation file
- **EMSAPIScript\_WebService.sql**—SQL file required to create the necessary API objects within your EMS database.

### Contact Customer Support

- **Option 1 (Recommended):** Search the Knowledge Base available at [Accruent Access](#).
- **Option 2:** Submit a case directly via [Accruent Access](#).
- **Option 3:** Email [emssupport@accruent.com](mailto:emssupport@accruent.com).
- **Option 4:** Phone (800) 288-4565.

**Important!**

If you do not have a customer login, register [here](#).

## CHAPTER 7: Install or Upgrade Database Components

### Install or Upgrade the Database Component in EMS Workplace / Campus / Enterprise / Legal / District

1. Obtain the **EMSAPIScript\_WebService.sql** file.
2. Open Microsoft SQL Server Management Studio.
3. Within Microsoft SQL Server Management Studio, select **File > Open > File...** and locate **EMSAPIScript\_WebService.sql**.
4. Select your EMS database and execute the query (**Query > Execute**). When query execution has completed, the message "Command(s) completed successfully" will display in the Results section.

### Install or Upgrade the Database Component in EMS Professional

Please contact your Professional Services Consultant or Customer Support.

- **Option 1 (Recommended):** Search the Knowledge Base available at [Accruent Access](#).
- **Option 2:** Submit a case directly via [Accruent Access](#).
- **Option 3:** Email [emssupport@accruent.com](mailto:emssupport@accruent.com).
- **Option 4:** Phone (800) 288-4565.

**Important!**

If you do not have a customer login, register [here](#).

## CHAPTER 8: Install or Upgrade EMS API Web Service



### Important!

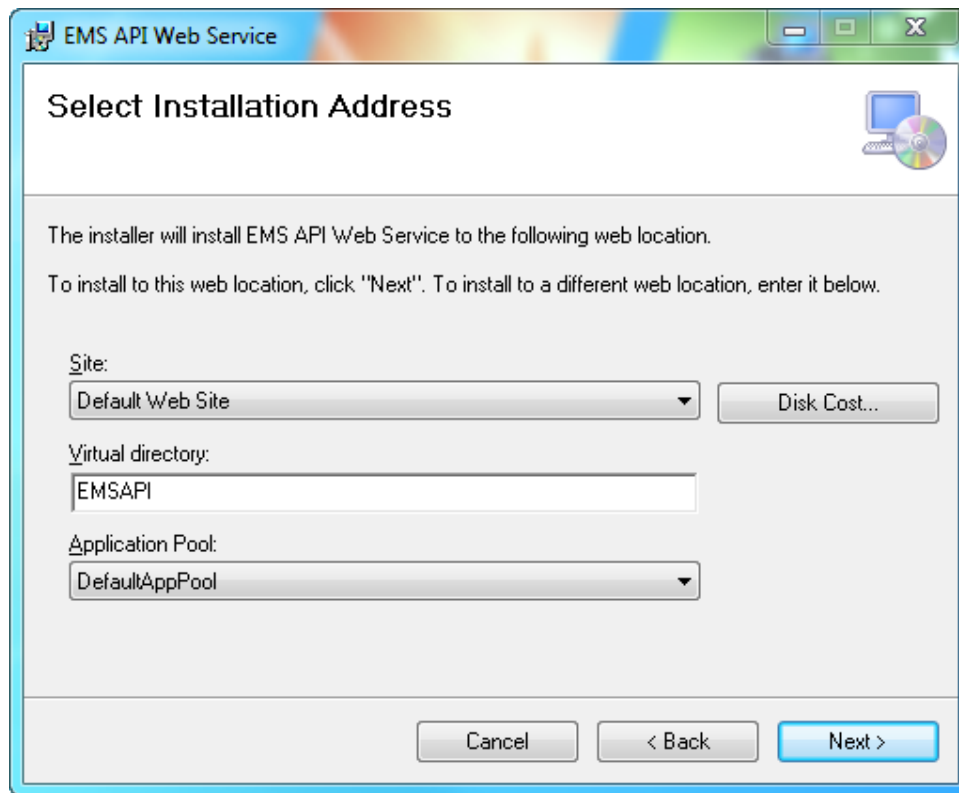
Before beginning the installation process, please do the following:

- Install or upgrade your EMS databases as outlined in the [EMS Desktop Client Installation Instructions](#).
- Manually **uninstall** any previous versions of the EMS API Web Service on your web server.

To install or upgrade EMS API Web Service:

1. Verify that the prerequisite software is installed.
2. Download **EMSAPI.msi** onto the web server.
3. Run **EMSAPI.msi**.
4. The first screen welcomes you to the EMS API Web Service Setup Wizard. Click **Next** to begin the installation process. The Select Installation Address screen will appear.



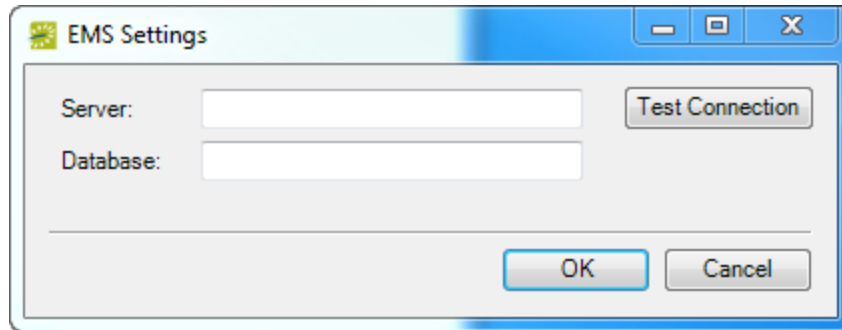


5. Select the **Site**, **Virtual Directory**, and **Application Pool**. It is recommended that you keep the default settings. The installation process will create a Physical and Virtual directory on your web server named "EMSAPI" (or whatever value you entered in the Virtual Directory field.) Click **Next** to begin the installation process.

**Note:**

The EMS API should **not** be installed in the same Virtual Directory as other EMS web-based products.

6. The Confirm Installation screen will appear. Click **Next**. The EMS Settings screen will appear.



7. Enter your EMS SQL Server Name.
8. Enter your EMS Database:
  - EMS Professional customers – enter “EMSDData”
  - EMS Workplace, EMS Campus, EMS Enterprise, EMS Legal, and EMS District customers—typically named “EMS”
9. Click **OK**.

The Installation Complete screen will appear.
10. Click **Close**.

## CHAPTER 9: Configure and Verify EMS for EMS API Web Service Use

This topic provides information about the following:

- [Connect EMS Desktop Client to the EMS API Web Service](#)
- [Enable JSON to Query Data](#)
- [Verify the EMS API](#)

### Connect EMS Desktop Client to the EMS API Web Service

External applications require a pre-defined EMS User account to authenticate to the EMS API Web Service. The EMS User account should not be granted any rights within the EMS application itself.

1. Launch the EMS client application and login with a user that has EMS administrator-level access.
2. Go to **System Administration > Security > Users**.
3. Click the **New** button. The User screen will appear.
4. Enter the following information:
  - Name
  - User ID
  - Password
5. On the Processes screen, select the **Special – EMS API Web Service Access** process.

**Note:**

If the **Special – EMS API Web Service Access** process does not exist, please contact Customer Support.

6. Click the **OK** button.

### Enable JSON to Query Data

If using JSON to interface with the API, it must be enabled. (It is disabled by default).

**Important!**

Installation must be complete before enabling JSON.

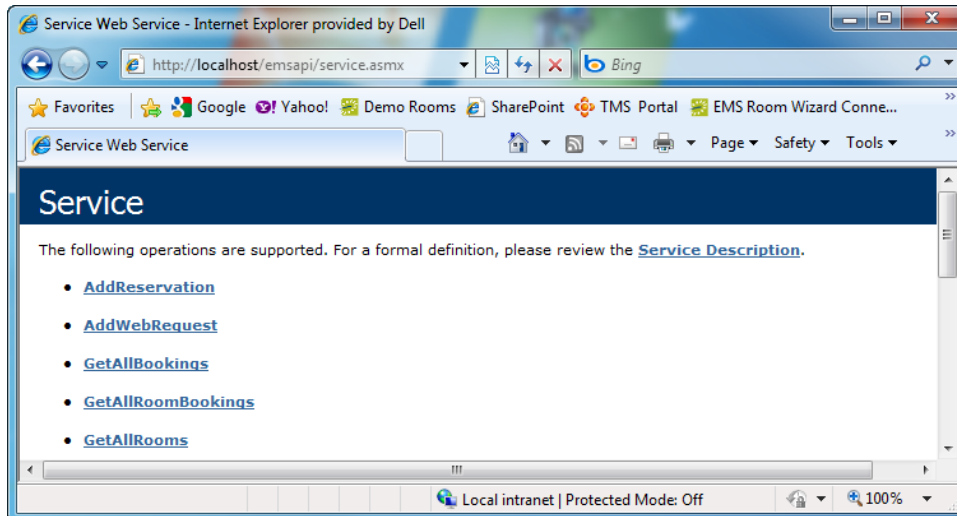
1. Edit the web.config file and enter `<add key="UseJSON" value="false"/>`.
2. Set the value to "true".

## Verify the EMS API

1. Open a browser and enter the following URL:

**`http://[ServerName]/EMSAPI/Service.asmx`** (replace [ServerName] with the name of your web server)

Your browser should return a list of API calls.



2. Verify the EMS API version by viewing the About page:

---

**`http://[ServerName]/EMSAPI/About.aspx`** (replace [ServerName] with the name of your web server)

---

## CHAPTER 10: EMS API Functions—ADD Operations

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- [AddWebRequest](#)
- [AddWebUser](#)

## AddBooking

(Requires EMS API Advanced License)

### Description

Adds a booking to a reservation in EMS.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
ReservationID	Reservation ID	Integer
RoomID	Room ID	Integer
BookingDate	Booking Date	DateTime
StartTime	Start Time	DateTime
EndTime	EndTime	DateTime
EventName	Event Name	String
StatusID	Status ID	Integer

## Response Elements

Name	Description	Type
BookingID	Booking ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddBooking()  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader(svc.AddBooking  
("UserID", "Password", 1234, 3199, Date.Today,  
CDate("1/1/1900 8:00 AM"), CDate("1/1/1900 9:00 AM"),  
"Meeting", 1))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Booking>  
  
<Data>  
  
    <BookingID>4567</BookingID>
```

&lt;/Data&gt;

&lt;/Booking&gt;

## AddBooking2

(Requires EMS API Advanced License)

### Description

Adds a Booking to a Reservation in EMS.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
ReservationID	Reservation ID	Integer
RoomID	Room ID	Integer
BookingDate	Booking Date	DateTime
StartTime	Start Time	DateTime
EndTime	EndTime	DateTime



Name	Description	Type
EventName	Event Name	String
StatusID	Status ID	Integer
EventTypeID	Event Type ID	Integer

## Response Elements

Name	Description	Type
BookingID	Booking ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddBooking()

    Dim svc As New EMSAPI.ServiceSoapClient

    Dim objReader As New System.IO.StringReader
    (svc.AddBooking2("UserID", "Password", 1234,
    3199, Date.Today, CDate("1/1/1900 8:00 AM"),
    CDate("1/1/1900 9:00 AM"),"Meeting",1, 1))

    Dim dst As New DataSet("Data")

    dst.ReadXml(objReader)

End Sub
```

## Example Response

```
<Booking>
  <Data>
    <BookingID>4567</BookingID>
  </Data>
</Booking>
```

## AddContact

(Requires EMS API Advanced License)

## Description

Creates a contact in EMS.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
GroupID	Group ID	Integer

Name	Description	Type
ContactName	Contact Name	String
Title	Title	String
Address1	Address Line 1	String
Address2	Address Line 2	String
City	City	String
State	State	String
ZipCode	Zip Code	String
Country	Country	String
Phone	Phone	String
Fax	Fax	String
EmailAddress	Email Address	String
ExternalReference	External Reference	String

## Response Elements

Name	Description	Type
ContactID	Contact ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddContact()  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
    (svc.AddContact("UserID", "Password", 1234,  
        "Test Contact", "", "123 Main St.", "", "Denver",  
        "CO", "80111", "", "x123", "", "Test@test.com", ""))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Contact>  
  
<Data>  
  
    <ContactID>12345</ContactID>  
  
</Data>
```

&lt;/Contact&gt;

## AddGroup

(Requires EMS API Advanced License)

### Description

Creates a group in EMS.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
GroupName	Group Name	String
GroupTypeID	Group Type ID	Integer
Address1	Address Line 1	String
Address2	Address Line 2	String
City	City	String
State	State	String

Name	Description	Type
ZipCode	Zip Code	String
Country	Country	String
Phone	Phone	String
Fax	Fax	String
EmailAddress	Email Address	String
ExternalReference	External Reference	String

## Response Elements

Name	Description	Type
GroupID	Group ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddGroup()  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
    (svc.AddGroup("UserID", "Password", "Test Group",
```

```
0, "123 Main St.", "", "Denver", "CO", "80111",  
"", "x123", "", "Test@test.com", "") )
```

```
Dim dst As New DataSet("Data")
```

```
dst.ReadXml(objReader)
```

```
End Sub
```

## Example Response

```
<Group>
```

```
<Data>
```

```
<GroupID>1234</GroupID>
```

```
</Data>
```

```
</Group>
```

## AddPayment

(Requires EMS API Advanced License)

## Description

Adds a payment to an invoice in EMS.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
TransactionDate	Transaction Date	Date
PaymentTypeID	Payment Type ID	Integer
CheckNo	Check Number	String
PaymentAmount	Payment Amount	Decimal
InvoiceNo	Invoice Number	String
Notes	Notes	String

## Response Elements

Name	Description	TYPE
Message	"Success!" or error, i.e. "Invoice Number is invalid."	String



## Sample Code

```
Private Sub AddPayment()  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
    (svc.AddPayment("UserID", "Password", #12/15/2011#,  
0, "1234", "INV100", ""))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Messages>  
<Message>  
    <Message>Success!</Message>  
</Message>  
</Messages>
```

## AddReservation

(Requires EMS API Advanced License)

## Description

Creates a reservation in EMS.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
GroupID	Group ID	Integer
RoomID	Room ID	Integer
BookingDate	Booking Date	DateTime
StartTime	Start Time	DateTime
EndTime	EndTime	DateTime
EventName	Event Name	String
StatusID	Status ID	Integer

## Response Elements

Name	Description	Type
ReservationID	Reservation ID that was created in EMS	Integer
BookingID	Booking ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddReservation()  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
    (svc.AddReservation("UserID", "Password", 11,  
3199, Date.Today, CDate("1/1/1900 8:00 AM"),  
CDate("1/1/1900 9:00 AM"),"Meeting",1))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Reservation>  
  
<Data>  
  
    <ReservationID>1234</ReservationID>
```

```
<BookingID>4567</BookingID>
</Data>
</Reservation>
```

## AddReservation2

(Requires EMS API Advanced License)

### Description

Creates a reservation in EMS tied to a Web User.

### Request Parameters

name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
GroupID	Group ID	Integer
RoomID	Room ID	Integer
BookingDate	Booking Date	DateTime
StartTime	Start Time	DateTime

name	Description	Type
EndTime	End Time	DateTime
EventName	Event Name	String
StatusID	Status ID	Integer
EventTypeID	Event Type ID	Integer
WebUserID	Web User ID	Integer
WebTemplateID	Web Template ID	Integer

## Response Elements

Name	Description	Type
ReservationID	Reservation ID that was created in EMS	Integer
BookingID	Booking ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddReservation2()  
    Dim svc As New EMSAPI.ServiceSoapClient
```

```
Dim objReader As New System.IO.StringReader  
  (svc.AddReservation2("UserID", "Password", 11,  
    3199, Date.Today, CDate("1/1/1900 8:00 AM"),  
    CDate("1/1/1900 9:00 AM"),"Meeting",1, 2, 468, 2))  
  
Dim dst As New DataSet("Data")  
  
dst.ReadXml(objReader)
```

```
End Sub
```

## Example Response

```
<Reservation>  
  <Data>  
    <ReservationID>1234</ReservationID>  
    <BookingID>4567</BookingID>  
  </Data>  
</Reservation>
```

## AddReservation3

(Requires EMS API Advanced License)

### Description

Creates a Reservation in EMS tied to a Web User.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
GroupID	Group ID	Integer
RoomID	Room ID	Integer
BookingDate	Booking Date	DateTime
StartTime	Start Time	DateTime
EndTime	End Time	DateTime
EventName	Event Name	String
StatusID	Status ID	Integer
EventTypeID	Event Type ID	Integer
WebUserID	Web User ID	Integer
WebTemplateID	Web Template ID	Integer
ReservationSourceID	Reservation Source ID	Integer

## Response Elements

Name	Description	Type
ReservationID	Reservation ID that was created in EMS	Integer
BookingID	Booking ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddReservation3()  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
    (svc.AddReservation3("UserID", "Password", 11,  
        3199, Date.Today, CDate("1/1/1900 8:00 AM"),  
        CDate("1/1/1900 9:00 AM"),"Meeting",1, 2, 468, 2, 1))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Reservation>  
<Data>  
  
    <ReservationID>1234</ReservationID>
```



```
<BookingID>4567</BookingID>
</Data>
</Reservation>
```

## AddReservation4

(Requires EMS API Advanced License)

### Description

Creates a reservation in EMS tied to a Web User and includes a Billing Reference.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
GroupID	Group ID	Integer
RoomID	Room ID	Integer
BookingDate	Booking Date	DateTime
StartTime	Start Time	DateTime

Name	Description	Type
EndTime	End Time	DateTime
EventName	Event Name	String
StatusID	Status ID	Integer
EventTypeID	Event Type ID	Integer
WebUserID	Web User ID	Integer
WebTemplateID	Web Template ID	Integer
ReservationSourceID	Reservation Source ID	Integer
BillingReference	Billing Reference	String

## Response Elements

Name	Description	Type
ReservationID	Reservation ID that was created in EMS	Integer
BookingID	Booking ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddReservation4()
```

```
Dim svc As New EMSAPI.ServiceSoapClient

Dim objReader As New System.IO.StringReader
(svc.AddReservation4("UserID", "Password", 11,
3199, Date.Today, CDate("1/1/1900 8:00 AM"),
CDate("1/1/1900 9:00 AM"),"Meeting",1, 2, 468, 2, 1, "abc"))

Dim dst As New DataSet("Data")

dst.ReadXml(objReader)
```

```
End Sub
```

## Example Response

```
<Reservation>
<Data>
  <ReservationID>1234</ReservationID>
  <BookingID>4567</BookingID>
</Data>
</Reservation>
```

## AddReservation5

(Requires EMS API Advanced License)

### Description

Creates a reservation in EMS tied to a Web User and includes a Billing Reference.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
GroupID	Group ID	Integer
RoomID	Room ID	Integer
BookingDate	Booking Date	DateTime
StartTime	Start Time	DateTime
EndTime	End Time	DateTime
EventName	Event Name	String
StatusID	Status ID	Integer
EventTypeID	Event Type ID	Integer
WebUserID	Web User ID	Integer
WebTemplateID	Web Template ID	Integer
ReservationSourceID	Reservation Source ID	Integer

Name	Description	Type
BillingReference	Billing Reference	String
PONumber	PO Number for reservation	String
SetupCount	Setup count for booking	Integer

## Response Elements

Name	Description	Type
ReservationID	Reservation ID that was created in EMS	Integer
BookingID	Booking ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddReservation5()

    Dim svc As New EMSAPI.ServiceSoapClient

    Dim objReader As New System.IO.StringReader
    (svc.AddReservation4("UserID", "Password", 11,
    3199, Date.Today, CDate("1/1/1900 8:00 AM"),
    CDate("1/1/1900 9:00 AM"), "Meeting", 1, 2, 468,
    2, 1, "abc", '00001lasdf', '2'))

    Dim dst As New DataSet("Data")
```

```
dst.ReadXml (objReader)  
  
End Sub
```

## Example Response

```
<Reservation>  
  <Data>  
    <ReservationID>1234</ReservationID>  
    <BookingID>4567</BookingID>  
  </Data>  
</Reservation>
```

## AddServiceOrder

(Requires EMS API Advanced License)

### Description

This API allows new service orders to be added to bookings.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String

Name	Description	Type
Password	EMS User Password	String
CategoryID	EMS category ID for which to add service order	Integer
BookingID	EMS Booking ID to attach service order	Integer
StateID	EMS State	Integer
ServeTypeID	EMS Service Type	Integer
TimeStart	Service Order Start Time	Datetime
TimeEnd	Service Order End Time	Datetime
EstimatedCount	Estimated Count	Integer
GuaranteedCount	Guaranteed Count	Integer
ActualCount	Actual Count	Integer

## Response Elements

Name	Description	Type
ServiceOrderID	Service Order ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddServiceOrder()  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
    (svc.AddUDFt("UserID", "Password", 1, 2, 1, 2,  
    '1/1/2012 11:00:00.000 AM', '2/1/2012 12:00:00.000  
    PM', 1, 2, 1))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<ServiceOrder>  
  
  <Data>  
  
    <ServiceOrderID >12345</ServiceOrderID>  
  
  </Data>  
  
</ServiceOrder>
```

## AddServiceOrderDetail

(Requires EMS API Advanced License)



## Description

This API allows new service order details (resources) to be added to existing service orders.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
ServiceOrderID	Service Order ID for which to add details	Integer
ResourceID	Resource ID to be added	Integer
Quantity	Quantity of item being ordered	Decimal
PricingMethodID	1: 'Unit' 2: 'Hourly (Reserved Time)' 3: 'Hourly (Event Time)' 4: 'Hourly (Service Time)' 5: 'Hourly (Specific)' 6: 'Half Day/Full Day (Reserved Time)' 7: 'Half Day/Full Day (Event Time)' 8: 'Half Day/Full Day (Service Time)'	Integer

Name	Description	Type
UnitPrice	Price per unit	Decimal
Notes	Notes	String
SpecialInstructions	Special Instructions	String

## Response Elements

Name	Description	Type
ServiceOrderDetailID	Service Order Detail ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddServiceOrderDetail()  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
    (svc.AddServiceOrderDetail("UserID", "Password",  
    1, 2, 1, 2, 1, 1.00, 'notest', "special instructions"))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<ServiceOrderDetail>
  <Data>
    <ServiceOrderDetailID>12345</ServiceOrderDetailID>
  </Data>
</ServiceOrderDetail>
```

## AddUDF

(Requires EMS API Advanced License)

## Description

Creates a UDF in EMS (reservation- or booking-level UDF only).

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
ParentLevelID	EMS Reservation Level: Reservation = 0, Booking = 1	Integer

Name	Description	Type
ParentID	Reservation ID or Booking ID	Integer
UDFDefID	UDF Definition ID	Integer
UDFValue	UDF Value	String

## Response Elements

Name	Description	Type
UDFID	UDF ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddUDF()

    Dim svc As New EMSAPI.ServiceSoapClient

    Dim objReader As New System.IO.StringReader
    (svc.AddUDFt("UserID", "Password", 1, 2, 1, "udf text"))

    Dim dst As New DataSet("Data")

    dst.ReadXml(objReader)

End Sub
```

## Example Response

```
<UDF>
<Data>
  <UDFID>12345</UDFID>
</Data>
</UDF>
```

## AddWebRequest

(Requires EMS API Advanced License)

### Description

Creates a Web Request in EMS.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
EventName	Event Name	String

Name	Description	Type
EventTypeID	Event Type ID	Integer
GroupName	Group Name	String
Contact	Contact	String
Phone	Phone	String
Fax	Fax	String
EmailAddress	Email Address	String
WebUserID	Web User ID	Integer
BuildingID	Building ID	Integer
RoomID	Room ID	Integer
BookingDate	Booking Date	DateTime
StartTime	Start Time	DateTime
EndTime	EndTime	DateTime
SetupTypeID	Setup Type ID	Integer
SetupCount	Setup Count	Integer

Name	Description	Type
Notes	Notes	String

## Response Elements

Name	Description	Type
WebRequestID	Web Request ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddWebRequest()

    Dim svc As New EMSAPI.ServiceSoapClient

    Dim objReader As New System.IO.StringReader
    (svc.AddWebRequest("UserID", "Password",
    "Meeting", 5, "ABC Company", "John Smith",
    "555-1212", "555-1213", "JohnSmith@abc.com", 25,
    1, 3199, Date.Today, CDate("1/1/1900 8:00 AM"),
    CDate("1/1/1900 9:00 AM"), 3,10, "Notes..."))

    Dim dst As New DataSet("Data")

    dst.ReadXml(objReader)

End Sub
```

## Example Response

```
<WebRequest>
  <Data>
    <WebRequestID>1234</WebRequestID>
  </Data>
</WebRequest>
```

## AddWebUser

(Requires EMS API Advanced License)

## Description

Creates a Web User in EMS.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
WebUserName	Web User Name	String



Name	Description	Type
WebUserPassword	Web User Password	String
EmailAddress	Email Address	String
Phone	Phone	String
Fax	Fax	String
ExternalReference	External Reference	String
NetworkID	Network ID	String
TimeZoneID	Time Zone ID	Integer
StatusID	Status ID (0=Active, 1=Pending, 2=Inactive, 3=Activate On Login)	Integer
WebSecurityTemplateID	Web Security Template ID	Integer
WebProcessTemplates	Web Process Template List	Array Of Integers
Groups	Group List	Array Of Integers
Validated	Validated	Boolean

## Response Elements

Name	Description	Type
WebUserID	Web User ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddWebUser()  
    Dim gintWebProcessTemplates As New Generic.List(Of Int32)  
    Dim gintGroups As New Generic.List(Of Int32)  
  
    gintWebProcessTemplates.Add(1)  
    gintWebProcessTemplates.Add(2)  
    gintWebProcessTemplates.Add(3)  
  
    gintGroups.Add(1234)  
  
    Dim strWebTemplates As New EMSAPI.ArrayOfInt  
    Dim strGroups As New EMSAPI.ArrayOfInt
```

```
strWebTemplates.AddRange(gintWebProcessTemplates.ToArray)
```

```
strGroups.AddRange(gintGroups.ToArray)
```

```
Dim svc As New EMSAPI.ServiceSoapClient
```

```
Dim objReader As New System.IO.StringReader(svc.AddWebUser("UserID",  
"Password", "New Web User", "password", "newwebuser@test.com", "x123", "", "", "",  
68, 0, 1, strWebTemplates, strGroups, 0))
```

```
Dim dst As New DataSet("Data")
```

```
dst.ReadXml(objReader)
```

```
End Sub
```

## Example Response

```
<WebUser>
```

```
<Data>
```

```
    <WebUserID>2314</WebUserID>
```

```
</Data>
```

```
</WebUser>
```

## CHAPTER 11: EMS API Functions—ADD Operations

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## AddBooking

(Requires EMS API Advanced License)

### Description

Adds a booking to a reservation in EMS.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
ReservationID	Reservation ID	Integer
RoomID	Room ID	Integer
BookingDate	Booking Date	DateTime
StartTime	Start Time	DateTime
EndTime	EndTime	DateTime
EventName	Event Name	String
StatusID	Status ID	Integer

## Response Elements

Name	Description	Type
BookingID	Booking ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddBooking()  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader(svc.AddBooking  
("UserID", "Password", 1234, 3199, Date.Today,  
CDate("1/1/1900 8:00 AM"), CDate("1/1/1900 9:00 AM"),  
"Meeting", 1))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Booking>  
  
<Data>  
  
    <BookingID>4567</BookingID>
```

&lt;/Data&gt;

&lt;/Booking&gt;

## AddBooking2

(Requires EMS API Advanced License)

### Description

Adds a Booking to a Reservation in EMS.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
ReservationID	Reservation ID	Integer
RoomID	Room ID	Integer
BookingDate	Booking Date	DateTime
StartTime	Start Time	DateTime
EndTime	EndTime	DateTime

Name	Description	Type
EventName	Event Name	String
StatusID	Status ID	Integer
EventTypeID	Event Type ID	Integer

## Response Elements

Name	Description	Type
BookingID	Booking ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddBooking()

    Dim svc As New EMSAPI.ServiceSoapClient

    Dim objReader As New System.IO.StringReader
    (svc.AddBooking2("UserID", "Password", 1234,
    3199, Date.Today, CDate("1/1/1900 8:00 AM"),
    CDate("1/1/1900 9:00 AM"),"Meeting",1, 1))

    Dim dst As New DataSet("Data")

    dst.ReadXml(objReader)

End Sub
```



## Example Response

```
<Booking>
  <Data>
    <BookingID>4567</BookingID>
  </Data>
</Booking>
```

## AddContact

(Requires EMS API Advanced License)

## Description

Creates a contact in EMS.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
GroupID	Group ID	Integer

Name	Description	Type
ContactName	Contact Name	String
Title	Title	String
Address1	Address Line 1	String
Address2	Address Line 2	String
City	City	String
State	State	String
ZipCode	Zip Code	String
Country	Country	String
Phone	Phone	String
Fax	Fax	String
EmailAddress	Email Address	String
ExternalReference	External Reference	String

## Response Elements

Name	Description	Type
ContactID	Contact ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddContact()  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
    (svc.AddContact("UserID", "Password", 1234,  
        "Test Contact", "", "123 Main St.", "", "Denver",  
        "CO", "80111", "", "x123", "", "Test@test.com", ""))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Contact>  
  
<Data>  
  
    <ContactID>12345</ContactID>  
  
</Data>
```

&lt;/Contact&gt;

## AddGroup

(Requires EMS API Advanced License)

### Description

Creates a group in EMS.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
GroupName	Group Name	String
GroupTypeID	Group Type ID	Integer
Address1	Address Line 1	String
Address2	Address Line 2	String
City	City	String
State	State	String

Name	Description	Type
ZipCode	Zip Code	String
Country	Country	String
Phone	Phone	String
Fax	Fax	String
EmailAddress	Email Address	String
ExternalReference	External Reference	String

## Response Elements

Name	Description	Type
GroupID	Group ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddGroup()  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
    (svc.AddGroup("UserID", "Password", "Test Group",
```

```
0, "123 Main St.", "", "Denver", "CO", "80111",  
"", "x123", "", "Test@test.com", "") )
```

```
Dim dst As New DataSet("Data")
```

```
dst.ReadXml(objReader)
```

```
End Sub
```

## Example Response

```
<Group>
```

```
<Data>
```

```
<GroupID>1234</GroupID>
```

```
</Data>
```

```
</Group>
```

## AddPayment

(Requires EMS API Advanced License)

## Description

Adds a payment to an invoice in EMS.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
TransactionDate	Transaction Date	Date
PaymentTypeID	Payment Type ID	Integer
CheckNo	Check Number	String
PaymentAmount	Payment Amount	Decimal
InvoiceNo	Invoice Number	String
Notes	Notes	String

## Response Elements

Name	Description	TYPE
Message	"Success!" or error, i.e. "Invoice Number is invalid."	String

## Sample Code

```
Private Sub AddPayment()  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
    (svc.AddPayment("UserID", "Password", #12/15/2011#,  
0, "1234", "INV100", ""))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Messages>  
<Message>  
    <Message>Success!</Message>  
</Message>  
</Messages>
```

## AddReservation

(Requires EMS API Advanced License)



## Description

Creates a reservation in EMS.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
GroupID	Group ID	Integer
RoomID	Room ID	Integer
BookingDate	Booking Date	DateTime
StartTime	Start Time	DateTime
EndTime	EndTime	DateTime
EventName	Event Name	String
StatusID	Status ID	Integer

## Response Elements

Name	Description	Type
ReservationID	Reservation ID that was created in EMS	Integer
BookingID	Booking ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddReservation()  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
    (svc.AddReservation("UserID", "Password", 11,  
3199, Date.Today, CDate("1/1/1900 8:00 AM"),  
CDate("1/1/1900 9:00 AM"), "Meeting", 1))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Reservation>  
  
<Data>  
  
    <ReservationID>1234</ReservationID>
```

```
<BookingID>4567</BookingID>  
</Data>  
</Reservation>
```

## AddReservation2

(Requires EMS API Advanced License)

### Description

Creates a reservation in EMS tied to a Web User.

### Request Parameters

name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
GroupID	Group ID	Integer
RoomID	Room ID	Integer
BookingDate	Booking Date	DateTime
StartTime	Start Time	DateTime

name	Description	Type
EndTime	End Time	DateTime
EventName	Event Name	String
StatusID	Status ID	Integer
EventTypeID	Event Type ID	Integer
WebUserID	Web User ID	Integer
WebTemplateID	Web Template ID	Integer

## Response Elements

Name	Description	Type
ReservationID	Reservation ID that was created in EMS	Integer
BookingID	Booking ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddReservation2()  
    Dim svc As New EMSAPI.ServiceSoapClient
```

```
Dim objReader As New System.IO.StringReader  
  (svc.AddReservation2("UserID", "Password", 11,  
    3199, Date.Today, CDate("1/1/1900 8:00 AM"),  
    CDate("1/1/1900 9:00 AM"), "Meeting", 1, 2, 468, 2))  
  
Dim dst As New DataSet("Data")  
  
dst.ReadXml(objReader)
```

```
End Sub
```

## Example Response

```
<Reservation>  
  <Data>  
    <ReservationID>1234</ReservationID>  
    <BookingID>4567</BookingID>  
  </Data>  
</Reservation>
```

## AddReservation3

(Requires EMS API Advanced License)

### Description

Creates a Reservation in EMS tied to a Web User.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
GroupID	Group ID	Integer
RoomID	Room ID	Integer
BookingDate	Booking Date	DateTime
StartTime	Start Time	DateTime
EndTime	End Time	DateTime
EventName	Event Name	String
StatusID	Status ID	Integer
EventTypeID	Event Type ID	Integer
WebUserID	Web User ID	Integer
WebTemplateID	Web Template ID	Integer
ReservationSourceID	Reservation Source ID	Integer

## Response Elements

Name	Description	Type
ReservationID	Reservation ID that was created in EMS	Integer
BookingID	Booking ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddReservation3()  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
    (svc.AddReservation3("UserID", "Password", 11,  
    3199, Date.Today, CDate("1/1/1900 8:00 AM"),  
    CDate("1/1/1900 9:00 AM"),"Meeting",1, 2, 468, 2, 1))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Reservation>  
  
<Data>  
  
    <ReservationID>1234</ReservationID>
```

```
<BookingID>4567</BookingID>
</Data>
</Reservation>
```

## AddReservation4

(Requires EMS API Advanced License)

### Description

Creates a reservation in EMS tied to a Web User and includes a Billing Reference.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
GroupID	Group ID	Integer
RoomID	Room ID	Integer
BookingDate	Booking Date	DateTime
StartTime	Start Time	DateTime



Name	Description	Type
EndTime	End Time	DateTime
EventName	Event Name	String
StatusID	Status ID	Integer
EventTypeID	Event Type ID	Integer
WebUserID	Web User ID	Integer
WebTemplateID	Web Template ID	Integer
ReservationSourceID	Reservation Source ID	Integer
BillingReference	Billing Reference	String

## Response Elements

Name	Description	Type
ReservationID	Reservation ID that was created in EMS	Integer
BookingID	Booking ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddReservation4()
```

```
Dim svc As New EMSAPI.ServiceSoapClient

Dim objReader As New System.IO.StringReader
(svc.AddReservation4("UserID", "Password", 11,
3199, Date.Today, CDate("1/1/1900 8:00 AM"),
CDate("1/1/1900 9:00 AM"),"Meeting",1, 2, 468, 2, 1, "abc"))

Dim dst As New DataSet("Data")

dst.ReadXml(objReader)
```

```
End Sub
```

## Example Response

```
<Reservation>
<Data>
  <ReservationID>1234</ReservationID>
  <BookingID>4567</BookingID>
</Data>
</Reservation>
```

## AddReservation5

(Requires EMS API Advanced License)

### Description

Creates a reservation in EMS tied to a Web User and includes a Billing Reference.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
GroupID	Group ID	Integer
RoomID	Room ID	Integer
BookingDate	Booking Date	DateTime
StartTime	Start Time	DateTime
EndTime	End Time	DateTime
EventName	Event Name	String
StatusID	Status ID	Integer
EventTypeID	Event Type ID	Integer
WebUserID	Web User ID	Integer
WebTemplateID	Web Template ID	Integer
ReservationSourceID	Reservation Source ID	Integer

Name	Description	Type
BillingReference	Billing Reference	String
PONumber	PO Number for reservation	String
SetupCount	Setup count for booking	Integer

## Response Elements

Name	Description	Type
ReservationID	Reservation ID that was created in EMS	Integer
BookingID	Booking ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddReservation5()

    Dim svc As New EMSAPI.ServiceSoapClient

    Dim objReader As New System.IO.StringReader
    (svc.AddReservation4("UserID", "Password", 11,
    3199, Date.Today, CDate("1/1/1900 8:00 AM"),
    CDate("1/1/1900 9:00 AM"), "Meeting", 1, 2, 468,
    2, 1, "abc", '00001lasdf', '2'))

    Dim dst As New DataSet("Data")
```

```
dst.ReadXml (objReader)  
  
End Sub
```

## Example Response

```
<Reservation>  
  <Data>  
    <ReservationID>1234</ReservationID>  
    <BookingID>4567</BookingID>  
  </Data>  
</Reservation>
```

## AddServiceOrder

(Requires EMS API Advanced License)

### Description

This API allows new service orders to be added to bookings.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String

Name	Description	Type
Password	EMS User Password	String
CategoryID	EMS category ID for which to add service order	Integer
BookingID	EMS Booking ID to attach service order	Integer
StateID	EMS State	Integer
ServeTypeID	EMS Service Type	Integer
TimeStart	Service Order Start Time	Datetime
TimeEnd	Service Order End Time	Datetime
EstimatedCount	Estimated Count	Integer
GuaranteedCount	Guaranteed Count	Integer
ActualCount	Actual Count	Integer

## Response Elements

Name	Description	Type
ServiceOrderID	Service Order ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddServiceOrder()  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
    (svc.AddUDFt("UserID", "Password", 1, 2, 1, 2,  
    '1/1/2012 11:00:00.000 AM', '2/1/2012 12:00:00.000  
    PM', 1, 2, 1))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<ServiceOrder>  
  
  <Data>  
  
    <ServiceOrderID >12345</ServiceOrderID>  
  
  </Data>  
  
</ServiceOrder>
```

## AddServiceOrderDetail

(Requires EMS API Advanced License)

## Description

This API allows new service order details (resources) to be added to existing service orders.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
ServiceOrderID	Service Order ID for which to add details	Integer
ResourceID	Resource ID to be added	Integer
Quantity	Quantity of item being ordered	Decimal
PricingMethodID	1: 'Unit' 2: 'Hourly (Reserved Time)' 3: 'Hourly (Event Time)' 4: 'Hourly (Service Time)' 5: 'Hourly (Specific)' 6: 'Half Day/Full Day (Reserved Time)' 7: 'Half Day/Full Day (Event Time)' 8: 'Half Day/Full Day (Service Time)'	Integer



Name	Description	Type
UnitPrice	Price per unit	Decimal
Notes	Notes	String
SpecialInstructions	Special Instructions	String

## Response Elements

Name	Description	Type
ServiceOrderDetailID	Service Order Detail ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddServiceOrderDetail()

    Dim svc As New EMSAPI.ServiceSoapClient

    Dim objReader As New System.IO.StringReader
    (svc.AddServiceOrderDetail("UserID", "Password",
    1, 2, 1, 2, 1, 1.00, 'notest', "special instructions"))

    Dim dst As New DataSet("Data")

    dst.ReadXml(objReader)

End Sub
```

## Example Response

```
<ServiceOrderDetail>
  <Data>
    <ServiceOrderDetailID>12345</ServiceOrderDetailID>
  </Data>
</ServiceOrderDetail>
```

## AddUDF

(Requires EMS API Advanced License)

## Description

Creates a UDF in EMS (reservation- or booking-level UDF only).

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
ParentLevelID	EMS Reservation Level: Reservation = 0, Booking = 1	Integer

Name	Description	Type
ParentID	Reservation ID or Booking ID	Integer
UDFDefID	UDF Definition ID	Integer
UDFValue	UDF Value	String

## Response Elements

Name	Description	Type
UDFID	UDF ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddUDF()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader  
    (svc.AddUDFt("UserID", "Password", 1, 2, 1, "udf text"))  
    Dim dst As New DataSet("Data")  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<UDF>
<Data>
  <UDFID>12345</UDFID>
</Data>
</UDF>
```

## AddWebRequest

(Requires EMS API Advanced License)

### Description

Creates a Web Request in EMS.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
EventName	Event Name	String

Name	Description	Type
EventTypeID	Event Type ID	Integer
GroupName	Group Name	String
Contact	Contact	String
Phone	Phone	String
Fax	Fax	String
EmailAddress	Email Address	String
WebUserID	Web User ID	Integer
BuildingID	Building ID	Integer
RoomID	Room ID	Integer
BookingDate	Booking Date	DateTime
StartTime	Start Time	DateTime
EndTime	EndTime	DateTime
SetupTypeID	Setup Type ID	Integer
SetupCount	Setup Count	Integer

Name	Description	Type
Notes	Notes	String

## Response Elements

Name	Description	Type
WebRequestID	Web Request ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddWebRequest()

    Dim svc As New EMSAPI.ServiceSoapClient

    Dim objReader As New System.IO.StringReader
    (svc.AddWebRequest("UserID", "Password",
    "Meeting", 5, "ABC Company", "John Smith",
    "555-1212", "555-1213", "JohnSmith@abc.com", 25,
    1, 3199, Date.Today, CDate("1/1/1900 8:00 AM"),
    CDate("1/1/1900 9:00 AM"), 3,10, "Notes..."))

    Dim dst As New DataSet("Data")

    dst.ReadXml(objReader)

End Sub
```

## Example Response

```
<WebRequest>
  <Data>
    <WebRequestID>1234</WebRequestID>
  </Data>
</WebRequest>
```

## AddWebUser

(Requires EMS API Advanced License)

## Description

Creates a Web User in EMS.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
WebUserName	Web User Name	String

Name	Description	Type
WebUserPassword	Web User Password	String
EmailAddress	Email Address	String
Phone	Phone	String
Fax	Fax	String
ExternalReference	External Reference	String
NetworkID	Network ID	String
TimeZoneID	Time Zone ID	Integer
StatusID	Status ID (0=Active, 1=Pending, 2=Inactive, 3=Activate On Login)	Integer
WebSecurityTemplateID	Web Security Template ID	Integer
WebProcessTemplates	Web Process Template List	Array Of Integers
Groups	Group List	Array Of Integers
Validated	Validated	Boolean



## Response Elements

Name	Description	Type
WebUserID	Web User ID that was created in EMS	Integer

## Sample Code

```
Private Sub AddWebUser()  
    Dim gintWebProcessTemplates As New Generic.List(Of Int32)  
    Dim gintGroups As New Generic.List(Of Int32)  
  
    gintWebProcessTemplates.Add(1)  
    gintWebProcessTemplates.Add(2)  
    gintWebProcessTemplates.Add(3)  
  
    gintGroups.Add(1234)  
  
    Dim strWebTemplates As New EMSAPI.ArrayOfInt  
    Dim strGroups As New EMSAPI.ArrayOfInt
```

```
strWebTemplates.AddRange(gintWebProcessTemplates.ToArray)
```

```
strGroups.AddRange(gintGroups.ToArray)
```

```
Dim svc As New EMSAPI.ServiceSoapClient
```

```
Dim objReader As New System.IO.StringReader(svc.AddWebUser("UserID",  
"Password", "New Web User", "password", "newwebuser@test.com", "x123", "", "", "",  
68, 0, 1, strWebTemplates, strGroups, 0))
```

```
Dim dst As New DataSet("Data")
```

```
dst.ReadXml(objReader)
```

```
End Sub
```

## Example Response

```
<WebUser>
```

```
<Data>
```

```
    <WebUserID>2314</WebUserID>
```

```
</Data>
```

```
</WebUser>
```

## CHAPTER 12: EMS API Functions—Auto Check-in Operation

### AutoCheckin

(Requires EMS API Advanced License)

#### Description

Automatically checks-in to a Booking in EMS.

#### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
EmailAddress	Email Address	String
WebUserID	Web User ID	Integer
UDFID	User Defined Field ID	Integer
UDFValue	Value of User Defined Field	String
BuildingID	Building ID	Integer

Name	Description	Type
RoomID	Room ID	Integer
FloorID	Floor ID	Integer
BookingDate	Date of Event	DateTime
EventType	Event Type (To remove this filter use '-1'.)	Integer

## Response Elements

Name	Description	Type
Message	"Success!" or error, i.e. "The information provide did not return any records."	String
BookingID	Booking ID	Integer
RoomID	Room ID	Integer

## Sample Code

```
Private Sub AutoCheckin()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader  
    (svc.AutoCheckin("UserID", "Password",
```

```
"test@test.com", 5, 6, "UDF Value", 1, 2, 3,  
Date.Today, 3))
```

```
Dim dst As New DataSet("Data")
```

```
dst.ReadXml(objReader)
```

```
End Sub
```

## Example Response

```
<AutoCheckinDetails>
```

```
<Data>
```

```
    <Message>Success</>
```

```
    <BookingID>1</BookingID>
```

```
    <RoomID>3</RoomID>
```

```
  </Data>
```

```
</ AutoCheckinDetails
```

## CHAPTER 13: EMS API Functions—Delete Operations

- [DeleteServiceOrder](#)
- [DeleteServiceOrderDetail](#)

### DeleteServiceOrder

(Requires EMS API Advanced License)

#### Description

This API allows deletion of service orders.

#### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
ServiceOrderID	Service Order ID	Integer

## Response Elements

Name	Description	Type
Message	"Success!" or error, i.e. "Service Order is not available."	String

## Sample Code

```
Private Sub DeleteServiceOrder()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader  
        (DeleteServiceOrder(("UserID", "Password", 1234))  
    Dim dst As New DataSet("Data")  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Messages>  
<Message>  
    <Message>Success!</Message>  
</Message>
```

&lt;/Messages&gt;

## DeleteServiceOrderDetail

(Requires EMS API Advanced License)

### Description

This API allows deletion of service order details (resources).

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
ServiceOrderDetailID	Service Order Detail ID	Integer

### Response Elements

Name	Description	Type
Message	"Success!" or error, i.e. "Service Order Detail is not available."	String



## Sample Code

```
Private Sub DeleteServiceOrderDetail()  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
        (svc.DeleteServiceOrderDetail("UserID",  
        "Password", 1234))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Messages>  
<Message>  
    <Message>Success!</Message>  
</Message>  
</Messages>
```

## CHAPTER 14: EMS API Functions—GET Operations

- [GetAllBookings](#)
- [GetAllBookings2](#)
- [GetAllComboRoomComponents](#)
- [GetAllRoomBookings](#)
- [GetAllRooms](#)
- [GetAPIVersion](#)
- [GetAreas](#)
- [GetBooking](#)
- [GetBookingCheckIn](#)
- [GetBookingHistory](#)
- [GetBookings](#)
- [GetBookings2](#)
- [GetBuildingHolidays](#)
- [GetBuildingHours](#)
- [GetBuildings](#)

- [GetCategories](#)
- [GetCategoryStates](#)
- [GetChangedBookings](#)
- [GetComboRoomComponents](#)
- [GetCommentTypes](#)
- [GetContactDetails](#)
- [GetContacts](#)
- [GetCourseBookings](#)
- [GetEventTypes](#)
- [GetFeatures](#)
- [GetGroupBookings](#)
- [GetGroupDetails](#)
- [GetGroups](#)
- [GetGroupTypes](#)
- [GetHVACBookings](#)
- [GetPricingMethod](#)
- [GetReservationComments](#)

- [GetReservationSources](#)
- [GetResources](#)
- [GetRoomAvailability](#)
- [GetRoomBookings](#)
- [GetRoomDetails](#)
- [GetRooms](#)
- [GetRoomsAvailable](#)
- [GetRoomsAvailable2](#)
- [GetRoomsAvailable3](#)
- [GetRoomsAvailable4](#)
- [GetRoomsBySetupType](#)
- [GetRoomsByWPT](#)
- [GetServiceOrderDetails](#)
- [GetServiceOrderDetails2](#)
- [GetSetupTypes](#)
- [GetStatuses](#)
- [GetUDFDefinitions](#)

- [GetUDFListItems](#)
- [GetWebProcessTemplateCategories](#)
- [GetWebSecurityTemplateRoles](#)
- [GetWebProcessTemplateSettings](#)
- [GetWebTemplates](#)
- [GetWebUserBookings](#)
- [GetWebUserDetails](#)
- [GetWebUserOptions](#)
- [GetWebUsers](#)
- [GetWebUserWebProcessTemplates](#)

## GetAllBookings

### Description

Returns a list of bookings for a specific building.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
StartDate	Start Date	DateTime
EndDate	End Date	DateTime
BuildingID	Building ID (-1= All Buildings)	Integer
ViewComboRoomComponents	Option to see bookings in components of combo rooms if bookings are in combo rooms	Boolean

## Response Elements

Name	Description	Type
BookingDate	Date that booking is reserved to start on	DateTime
StartBookingDate	Date that booking event starts on	DateTime
RoomDescription	Location Description	String

Name	Description	Type
TimeEventStart	Booking Event Start Time	DateTime
TimeEventEnd	Booking Event End Time	DateTime
GroupName	Group/Customer name	String
EventName	Event Name	String
SetupTypeDescription	Setup Type Description	String
SetupCount	Setup Count	Integer
ReservationID	Reservation ID	Integer
EventCoordinator	Initials of Event Coordinator	String
GroupID	Group/Customer ID	Integer
VIP	'VIP' or empty string to signify a VIP event	String
VIPEvent	0 or 1 to signify a VIP event	Boolean
ClosedAllDay	0 or 1 to signify if the Building is closed	Boolean
OpenTime	Time Building Opens	DateTime
CloseTime	Time Building Closes	DateTime

Name	Description	Type
GroupTypeDescription	Group Type Description	String
EventTypeDescription	Event Type Description	String
Contact	Contact Name	String
AltContact	Alternate Contact Name	String
BookingID	Booking ID	Integer
TimeBookingStart	Booking Reserved Start Time	DateTime
TimeBookingEnd	Booking Reserved End Time	DateTime
GMTStartTime	Booking Reserved GMT Start Time	DateTime
GMTEndTime	Booking Reserved GMT End Time	DateTime
TimeZone	Time Zone abbreviation	String
BuildingCode	Building Code	String
Building	Building Description	String
RoomCode	Room Code	String
Room	Room	String



Name	Description	Type
RoomID	Room ID	Integer
BuildingID	Building ID	Integer
RoomTypeID	Room Type ID	Integer
RoomType	Room Type	String
HVACZone	Room HVAC Zone	String
StatusID	Status ID	Integer
StatusTypeID	Status Type: -14 = Booked Space, -11 = Info Only, -13 = Wait, -12 = Cancel	Integer
EventTypeID	Event Type ID	Integer
GroupTypeID	Group Type ID	Integer
DateAdded	Date/Time Booking Added	DateTime
AddedBy	Booking Added By	String
DateChanged	Date/Time Booking Changed	DateTime
ChangedBy	Booking Changed By	String

Name	Description	Type
ContactEmailAddress	Contact Email Address	String
CheckedIn	0 or 1 to signify Checked in or not	Boolean

## Sample Code

```
Private Sub GetBookings()  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New StringReader  
        (svc.GetAllBookings("UserID", "Password",  
        Date.Today, Date.Today, 1, False))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Bookings>  
  
<Data>  
  
    <BookingDate>2009-10-04T00:00:00</BookingDate>  
    <StartBookingDate>2009-10-04T00:00:00</StartBookingDate>  
    <RoomDescription>DEN Room 101</RoomDescription>
```

```
<TimeEventStart>2009-10-04T16:00:00</TimeEventStart>
<TimeEventEnd>2009-10-04T17:00:00</TimeEventEnd>
<GroupName>ABC Company </GroupName>
<EventName>Spring Conference</EventName>
<SetupTypeDescription>U - Shape</SetupTypeDescription>
<SetupCount>50</SetupCount>
<ReservationID>6650</ReservationID>
<EventCoordinator />
<GroupID>499</GroupID>
<VIP xml:space="preserve">
</VIP>
<VIPEvent>false</VIPEvent>
<ClosedAllDay>false</ClosedAllDay>
<OpenTime>1900-01-01T00:00:00</OpenTime>
<CloseTime>1900-01-01T00:00:00</CloseTime>
<GroupTypeDescription>Corporate</GroupTypeDescription>
<EventTypeDescription>Conference</EventTypeDescription>
<Contact>Jim Smith</Contact>
<AltContact />
```

```
<BookingID>222008</BookingID>
<TimeBookingStart>2009-10-04T16:00:00</TimeBookingStart>
<TimeBookingEnd>2009-10-04T17:00:00</TimeBookingEnd>
<GMTStartTime>2009-10-04T22:00:00</GMTStartTime>
<GMTEndTime>2009-10-04T23:00:00</GMTEndTime>
<TimeZone>MT</TimeZone>
<BuildingCode>DEN</BuildingCode>
<Building>Denver</Building>
<RoomCode>RM101</RoomCode>
<Room>Room 101</RoomCode>
<RoomID>3271</RoomID>
<BuildingID>1</BuildingID>
<RoomTypeID>1</RoomTypeID>
<RoomType>Classroom</RoomType>
<HVACZone/>
<StatusID>1</StatusID>
<StatusTypeID>-14</StatusTypeID>
<EventTypeID>4</EventTypeID>
<GroupTypeID>3</GroupTypeID>
<DateAdded>2009-10-04T16:00:00</DateAdded>
```

```
<AddedBy>User 1</AddedBy>  
<DateChanged>2009-10-04T16:00:00</DateChanged>  
<ChangedBy>User 1</ChangedBy>  
<ContactEmailAddress>jsmith@test.com</ContactEmailAddress>  
<CheckedIn>>false</CheckedIn>  
</Data>  
</Bookings>
```

## GetAllBookings2

### Description

Returns a list of bookings for a specific building for a specific UDF value (Reservation or Booking level UDF only).

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
StartDate	Start Date	DateTime

Name	Description	Type
EndDate	End Date	DateTime
BuildingID	Building ID (-1= All Buildings)	Integer
ViewComboRoomComponents	Option to see bookings in components of combo rooms if bookings are in combo rooms	Boolean
UDFDefID	ID of UDF Definition	Integer
UDFValue	UDF Value	String

## Response Elements

Name	Description	Type
BookingDate	Date that booking is reserved to start on	DateTime
StartBookingDate	Date that booking event starts on	DateTime
RoomDescription	Location Description	String
TimeEventStart	Booking Event Start Time	DateTime
TimeEventEnd	Booking Event End Time	DateTime

Name	Description	Type
GroupName	Group/Customer name	String
EventName	Event Name	String
SetupTypeDescription	Setup Type Description	String
SetupCount	Setup Count	Integer
ReservationID	Reservation ID	Integer
EventCoordinator	Initials of Event Coordinator	String
GroupID	Group/Customer ID	Integer
VIP	'VIP' or empty string to signify a VIP event	String
VIPEvent	0 or 1 to signify a VIP event	Boolean
ClosedAllDay	0 or 1 to signify if the Building is closed	Boolean
OpenTime	Time Building Opens	DateTime
CloseTime	Time Building Closes	DateTime
GroupTypeDescription	Group Type Description	String
EventTypeDescription	Event Type Description	String

Name	Description	Type
Contact	Contact Name	String
AltContact	Alternate Contact Name	String
BookingID	Booking ID	Integer
TimeBookingStart	Booking Reserved Start Time	DateTime
TimeBookingEnd	Booking Reserved End Time	DateTime
GMTStartTime	Booking Reserved GMT Start Time	DateTime
GMTEndTime	Booking Reserved GMT End Time	DateTime
TimeZone	Time Zone abbreviation	String
BuildingCode	Building Code	String
Building	Building Description	String
RoomCode	Room Code	String
Room	Room	String
RoomID	Room ID	Integer
BuildingID	Building ID	Integer



Name	Description	Type
RoomTypeID	Room Type ID	Integer
RoomType	Room Type	String
HVACZone	Room HVAC Zone	String
StatusID	Status ID	Integer
StatusTypeID	Status Type: -14 = Booked Space, -11 = Info Only, -13 = Wait, -12 = Cancel	Integer
EventTypeID	Event Type ID	Integer
GroupTypeID	Group Type ID	Integer
DateAdded	Date/Time Booking Added	DateTime
AddedBy	Booking Added By	String
DateChanged	Date/Time Booking Changed	DateTime
ChangedBy	Booking Changed By	String
ContactEmailAddress	Contact Email Address	String
CheckedIn	0 or 1 to signify Checked in or not	Boolean

## Sample Code

```
Private Sub GetBookings2()  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New StringReader  
    (svc.GetAllBookings2("UserID", "Password",  
        Date.Today, Date.Today, 1, False, 1, "udf text"))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Bookings>  
  
<Data>  
  
    <BookingDate>2009-10-04T00:00:00</BookingDate>  
    <StartBookingDate>2009-10-04T00:00:00</StartBookingDate>  
    <RoomDescription>DEN Room 101</RoomDescription>  
    <TimeEventStart>2009-10-04T16:00:00</TimeEventStart>  
    <TimeEventEnd>2009-10-04T17:00:00</TimeEventEnd>  
    <GroupName>ABC Company </GroupName>  
    <EventName>Spring Conference</EventName>
```

```
<SetupTypeDescription>U - Shape</SetupTypeDescription>
<SetupCount>50</SetupCount>
<ReservationID>6650</ReservationID>
<EventCoordinator />
<GroupID>499</GroupID>
<VIP xml:space="preserve">
</VIP>
<VIPEvent>false</VIPEvent>
<ClosedAllDay>false</ClosedAllDay>
<OpenTime>1900-01-01T00:00:00</OpenTime>
<CloseTime>1900-01-01T00:00:00</CloseTime>
<GroupTypeDescription>Corporate</GroupTypeDescription>
<EventTypeDescription>Conference</EventTypeDescription>
<Contact>Jim Smith</Contact>
<AltContact />
<BookingID>222008</BookingID>
<TimeBookingStart>2009-10-04T16:00:00</TimeBookingStart>
<TimeBookingEnd>2009-10-04T17:00:00</TimeBookingEnd>
<GMTStartTime>2009-10-04T22:00:00</GMTStartTime>
```

```
<GMTEndTime>2009-10-04T23:00:00</GMTEndTime>  
<TimeZone>MT</TimeZone>  
<BuildingCode>DEN</BuildingCode>  
<Building>Denver</Building>  
<RoomCode>RM101</RoomCode>  
<Room>Room 101</RoomCode>  
<RoomID>3271</RoomID>  
<BuildingID>1</BuildingID>  
<RoomTypeID>1</RoomTypeID>  
<RoomType>Classroom</RoomType>  
<HVACZone/>  
<StatusID>1</StatusID>  
<StatusTypeID>-14</StatusTypeID>  
<EventTypeID>4</EventTypeID>  
<GroupTypeID>3</GroupTypeID>  
<DateAdded>2009-10-04T16:00:00</DateAdded>  
<AddedBy>User 1</AddedBy>  
<DateChanged>2009-10-04T16:00:00</DateChanged>  
<ChangedBy>User 1</ChangedBy>  
<ContactEmailAddress>jsmith@test.com</ContactEmailAddress>
```

```
<CheckedIn>false</CheckedIn>
</Data>
</Bookings>
```

## GetAllComboRoomComponents

### Description

Returns component room details for all combo rooms.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String

### Response Elements

Name	Description	Type
ParentRoom	Parent Room Code	String
ParentDescription	Parent Room Description	String

Name	Description	Type
ParentBuilding	Parent Building	String
ParentID	Parent Room ID	Integer
ComponentRoom	Component Room Code	String
ComponentDescription	Component Room Description	String
ComponentBuilding	Component Building	String
ComponentID	Component Room ID	Integer

## Sample Code

```
Private Sub GetAllComboRoomComponents()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader  
        (svc.GetAllComboRoomComponents("UserID", "Password"))  
    Dim dst As New DataSet("Data")  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<RoomComponents>
<Data>
  <ParentRoom>RM 101</Room>
  <ParentDescription>Room 101</Description>
  <ParentBuilding>Denver</Building>
  <ParentID>3271</ParentID>
  <ComponentRoom>Room 102 </ComponentRoom>
  <ComponentDescription>Room 102</Description>
  <ComponentBuilding>Denver</Building>
  <ComponentID>3272</ComponentID>
  <ParentRoom>RM 101</Room>
  <ParentDescription>Room 101</Description>
  <ParentBuilding>Denver</Building>
  <ParentID>3273</ParentID>
  <ComponentRoom>Room 103 </ComponentRoom>
  <ComponentDescription>Room 103</Description>
  <ComponentBuilding>Denver</Building>
  <ComponentID>3273</ComponentID>
```

```
</Data>  
</ RoomComponents >
```

## GetAllRoomBookings

### Description

Returns a list of bookings for a specific room.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
StartDate	Start Date	DateTime
EndDate	End Date	DateTime
RoomID	Room ID	Integer
ViewComboRoomComponents	Option to see bookings in components of combo rooms if bookings are in combo rooms	Boolean



## Response Elements

Name	Description	Type
BookingDate	Date that booking is reserved to start on	DateTime
StartBookingDate	Date that booking event starts on	DateTime
RoomDescription	Location Description	String
TimeEventStart	Booking Event Start Time	DateTime
TimeEventEnd	Booking Event End Time	DateTime
GroupName	Group/Customer name	String
EventName	Event Name	String
SetupTypeDescription	Setup Type Description	String
SetupCount	Setup Count	Integer
ReservationID	Reservation ID	Integer
EventCoordinator	Initials of Event Coordinator	String
GroupID	Group/Customer ID	Integer
VIP	'VIP' or empty string to signify a VIP event	String

Name	Description	Type
VIPEvent	0 or 1 to signify a VIP event	Boolean
ClosedAllDay	0 or 1 to signify if the Building is closed	Boolean
OpenTime	Time Building Opens	DateTime
CloseTime	Time Building Closes	DateTime
GroupTypeDescription	Group Type Description	String
EventTypeDescription	Event Type Description	String
Contact	Contact Name	String
AltContact	Alternate Contact Name	String
BookingID	Booking ID	Integer
BuildingID	Building ID	Integer
TimeBookingStart	Booking Reserved Start Time	DateTime
TimeBookingEnd	Booking Reserved End Time	DateTime
GMTStartTime	Booking Reserved GMT Start Time	DateTime
GMTEndTime	Booking Reserved GMT End Time	DateTime

Name	Description	Type
TimeZone	Time Zone abbreviation	String
BuildingCode	Building Code	String
Building	Building Description	String
RoomCode	Room Code	String
Room	Room	String
RoomID	Room ID	Integer
BuildingID	Building ID	Integer
StatusID	Status ID	Integer
StatusTypeID	Status Type: -14 = Booked Space, -11 = Info Only, -13 = Wait, -12 = Cancel	Integer
EventTypeID	Event Type ID	Integer
GroupTypeID	Group Type ID	Integer
RoomTypeID	Room Type ID	Integer
RoomType	Room Type	String
DateAdded	Date/Time Booking Added	DateTime

Name	Description	Type
AddedBy	Booking Added By	String
DateChanged	Date/Time Booking Changed	DateTime
ChangedBy	Booking Changed By	String
ContactEmailAddress	Contact Email Address	String
CheckedIn	0 or 1 to signify Checked in or not	Boolean

## Sample Code

```
Private Sub GetBookings()  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New StringReader  
    (svc.GetAllRoomBookings("UserID", "Password",  
    Date.Today, Date.Today, 3271, False))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

<Bookings>

<Data>

```
<BookingDate>2009-10-04T00:00:00</BookingDate>
<StartBookingDate>2009-10-04T00:00:00</StartBookingDate>
<RoomDescription>DEN Room 101</RoomDescription>
<TimeEventStart>2009-10-04T16:00:00</TimeEventStart>
<TimeEventEnd>2009-10-04T17:00:00</TimeEventEnd>
<GroupName>ABC Company </GroupName>
<EventName>Spring Conference</EventName>
<SetupTypeDescription>U - Shape</SetupTypeDescription>
<SetupCount>50</SetupCount>
<ReservationID>6650</ReservationID>
<EventCoordinator />
<GroupID>499</GroupID>
<VIP xml:space="preserve">
</VIP>
<VIPEvent>false</VIPEvent>
<ClosedAllDay>false</ClosedAllDay>
```

```
<OpenTime>1900-01-01T00:00:00</OpenTime>
<CloseTime>1900-01-01T00:00:00</CloseTime>
<GroupTypeDescription>Corporate</GroupTypeDescription>
<EventTypeDescription>Conference</EventTypeDescription>
<Contact>Jim Smith</Contact>
<AltContact />
<BookingID>222008</BookingID>
<TimeBookingStart>2009-10-04T16:00:00</TimeBookingStart>
<TimeBookingEnd>2009-10-04T17:00:00</TimeBookingEnd>
<GMTStartTime>2009-10-04T22:00:00</GMTStartTime>
<GMTEndTime>2009-10-04T23:00:00</GMTEndTime>
<TimeZone>MT</TimeZone>
<BuildingCode>DEN</BuildingCode>
<Building>Denver</Building>
<RoomCode>RM101</RoomCode>
<Room>Room 101</RoomCode>
<RoomID>3271</RoomID>
<BuildingID>1</BuildingID>
<StatusID>1</StatusID>
```

```
<StatusTypeID>-14</StatusTypeID>
<EventTypeID>4</EventTypeID>
<GroupTypeID>3</GroupTypeID>
<RoomTypeID>1</RoomTypeID>
<RoomType>Classroom</RoomType>
<DateAdded>2009-10-04T16:00:00</DateAdded>
<AddedBy>User 1</AddedBy>
<DateChanged>2009-10-04T16:00:00</DateChanged>
<ChangedBy>User 1</ChangedBy>
  <ContactEmailAddress>jsmith@test.com</ContactEmailAddress>
<CheckedIn>>false</CheckedIn>
</Data>
</Bookings>
```

## GetAllRooms

### Description

Returns list of rooms.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
BuildingID	Building ID (-1= All Buildings)	Integer

## Response Elements

Name	Description	Type
Room	Room Code	String
Description	Room Description	String
Building	Building	String
Floor	Floor Description	String
Type	Room Type	String
Classification	Room Classification	String
Phone	Room Phone	String
Notes	Room Notes	String



Name	Description	Type
RoomSize	Room Size	Integer
SetupHours	Room Setup Hours	Decimal
TeardownHours	Room Teardown Hours	Decimal
HVACZone	Room HVAC Zone	String
URL	Room URL	String
Active	Room Active	Boolean
BuildingID	Building ID	Integer
ID	Room ID	Integer
ExternalReference	Room External Reference	String
DisplayOnWeb	Room Display On Web	Boolean

## Sample Code

```
Private Sub GetRooms()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader  
    (svc.GetAllRooms("UserID", "Password", 1))
```

```
        Dim dst As New DataSet("Data")  
        dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Rooms>  
<Data>  
  <Room>RM 101</Room>  
  <Description>Room 101</Description>  
  <Building>Denver</Building>  
  <Floor>1st Floor</Floor>  
  <Type>Meeting Room</Type>  
  <Classification>Standard</Classification>  
  <Phone>x123</Phone>  
  <Notes />  
  <RoomSize>20</RoomSize>  
  <SetupHours>0</SetupHours>  
  <TeardownHours>0</TeardownHours>  
  <HVACZone />
```

```
<URL />
    <Active>1</Active>
    <BuildingID>1</BuildingID>
    <ID>3271</ID>
    <ExternalReference />
    <DisplayOnWeb>1</DisplayOnWeb>
</Data>
</Rooms>
```

## GetAPIVersion

### Description

Returns API version.

### Request Parameters

(none)

### Example Response

```
<API>
  <APIVersion>
    <Version>1.1.19.0</Version>
```

```
<License>Advanced</License>  
</APIVersion>  
</API>
```

**Note:**

The Read Only API returns a value of **Basic**, the Updating API returns a value of **Advanced**.

## GetAreas

### Description

Returns a list of areas and associated buildings.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
AreaID	Area ID (-1 = All Areas)	Integer

## Response Elements

Name	Description	Type
ID	AreaID	Integer
AreaDescription	Area Description	String
AreaNotes	Area Notes	String
BuildingID	Building ID	Integer

## Sample Code

```
Private Sub GetAreas()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader  
        (svc.GetAreas("UserID", "Password", 12))  
    Dim dst As New DataSet("Data")  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Areas>
```

```
<Data>
  <ID>12</ID>
  <AreaDescription>Midwest</AreaDescription>
  <AreaNotes></AreaNotes>
  <BuildingID>1</BuildingID>
</Data>
<Data>
  <ID>12</ID>
  <AreaDescription>Midwest</AreaDescription>
  <AreaNotes></AreaNotes>
  <BuildingID>2</BuildingID>
</Data>
</Areas>
```

## GetBooking

### Description

Returns booking information for a specific booking.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
BookingID	Booking ID	Integer

## Response Elements

Name	Description	Type
BookingDate	Date that booking is reserved to start on	DateTime
StartBookingDate	Date that booking event starts on	DateTime
RoomDescription	Location Description	String
TimeEventStart	Booking Event Start Time	DateTime
TimeEventEnd	Booking Event End Time	DateTime
GroupName	Group/Customer name	String
EventName	Event Name	String
SetupTypeDescription	Setup Type Description	String

Name	Description	Type
SetupCount	Setup Count	Integer
ReservationID	Reservation ID	Integer
EventCoordinator	Initials of Event Coordinator	String
GroupID	Group/Customer ID	Integer
VIP	'VIP' or empty string to signify a VIP event	String
VIPEvent	0 or 1 to signify a VIP event	Boolean
ClosedAllDay	0 or 1 to signify if the Building is closed	Boolean
OpenTime	Time Building Opens	DateTime
CloseTime	Time Building Closes	DateTime
GroupTypeDescription	Group Type Description	String
EventTypeDescription	Event Type Description	String
Contact	Contact Name	String
AltContact	Alternate Contact Name	String
BookingID	Booking ID	Integer



Name	Description	Type
BuildingID	Building ID	Integer
TimeBookingStart	Booking Reserved Start Time	DateTime
TimeBookingEnd	Booking Reserved End Time	DateTime
GMTStartTime	Booking Reserved GMT Start Time	DateTime
GMTEndTime	Booking Reserved GMT End Time	DateTime
TimeZone	Time Zone abbreviation	String
BuildingCode	Building Code	String
Building	Building Description	String
RoomCode	Room Code	String
Room	Room	String
RoomID	Room ID	Integer
RoomTypeID	Room Type ID	Integer
BuildingID	Building ID	Integer
StatusID	Status ID	Integer

Name	Description	Type
StatusTypeID	Status Type: -14 = Booked Space, -11 = Info Only, -13 = Wait, -12 = Cancel	Integer
EventTypeID	Event Type ID	Integer
GroupTypeID	Group Type ID	Integer
WebProcessTemplateID	Web Process Template ID	Integer
CheckedIn	0 or 1 to signify Checked in or not	Boolean

## Sample Code

```
Private Sub GetBooking()  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New StringReader  
    (svc.GetBooking("UserID", "Password", 222008))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Booking>
```

<Data>

```
<BookingDate>2009-10-04T00:00:00</BookingDate>
<StartBookingDate>2009-10-04T00:00:00</StartBookingDate>
<RoomDescription>DEN Room 101</RoomDescription>
<TimeEventStart>2009-10-04T16:00:00</TimeEventStart>
<TimeEventEnd>2009-10-04T17:00:00</TimeEventEnd>
<GroupName>ABC Company </GroupName>
<EventName>Spring Conference</EventName>
<SetupTypeDescription>U - Shape</SetupTypeDescription>
<SetupCount>50</SetupCount>
<ReservationID>6650</ReservationID>
<EventCoordinator />
<GroupID>499</GroupID>
<VIP xml:space="preserve">
</VIP>
<VIPEvent>false</VIPEvent>
<ClosedAllDay>false</ClosedAllDay>
<OpenTime>1900-01-01T00:00:00</OpenTime>
<CloseTime>1900-01-01T00:00:00</CloseTime>
```

```
<GroupTypeDescription>Corporate</GroupTypeDescription>
<EventTypeDescription>Conference</EventTypeDescription>
<Contact>Jim Smith</Contact>
<AltContact />
<BookingID>222008</BookingID>
<TimeBookingStart>2009-10-04T16:00:00</TimeBookingStart>
<TimeBookingEnd>2009-10-04T17:00:00</TimeBookingEnd>
<GMTStartTime>2009-10-04T22:00:00</GMTStartTime>
<GMTEndTime>2009-10-04T23:00:00</GMTEndTime>
<TimeZone>MT</TimeZone>
<BuildingCode>DEN</BuildingCode>
<Building>Denver</Building>
<RoomCode>RM101</RoomCode>
<Room>Room 101</RoomCode>
<RoomID>3271</RoomID>
<RoomTypeID>0</RoomTypeID>
<BuildingID>1</BuildingID>
<StatusID>1</StatusID>
<StatusTypeID>-14</StatusTypeID>
```

```
<EventTypeID>4</EventTypeID>  
<GroupTypeID>3</GroupTypeID>  
<WebProcessTemplateID>0</WebProcessTemplateID>  
<CheckedIn>>false</CheckedIn>  
</Data>  
</Booking>
```

## GetBookingCheckIn

### Description

Returns check in properties for a booking.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
BookingID	Booking ID	Integer

## Response Elements

Name	Description	Type
BookingID	Booking ID	Integer
CheckedIn	Checked In	Boolean
CheckInDate	Date/Time Checked In	DateTime

## Sample Code

```
Private Sub GetBookingCheckIn()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader  
        (svc.GetBookingCheckIn("UserID", "Password", 12345))  
    Dim dst As New DataSet("Data")  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Bookings>  
    <Data>  
        <BookingID>12345</BookingID>
```

```
<CheckedIn>true</CheckedIn>
<CheckInDate>2015-01-07T11:17:22.833</CheckInDate>
</Data>
</Bookings>
```

## GetBookingHistory

### Description

For each booking that has changed or has been created within a specified time period, this API returns all of the changes, including the baseline record.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
StartDate	Start Date (DateChanged on tblBooking)	DateTime
EndDate	End Date (DateChanged on tblBooking)	DateTime
Rooms	List of Room IDs	Array Of Integers
Statuses	List of Status IDs	Array Of Integers

Name	Description	Type
EventTypes	List of Event Type IDs	Array Of Integers
GroupTypes	List of Group Type IDs	Array Of Integers
ViewComboRoomComponents	Option to see bookings in components of combo rooms if bookings are in combo rooms	Boolean

## Response Elements

Baseline (latest data for a booking that has changed during the time period).

Name	Description	Type
BookingDate	Booking Date based on reserved time	DateTime
StartBookingDate	Booking Date based on event time	DateTime
RoomDescription	Location Description	String
TimeEventStart	Booking Event Start Time	DateTime
TimeEventEnd	Booking Event End Time	DateTime
GroupName	Group/Customer name	String
EventName	Event Name	String
SetupTypeDescription	Setup Type Description	String



Name	Description	Type
SetupCount	Setup Count	Integer
ReservationID	Reservation ID	Integer
EventCoordinator	Initials of Event Coordinator	String
GroupID	Group/Customer ID	Integer
VIP	'VIP' or empty string to signify a VIP event	String
VIPEvent	0 or 1 to signify a VIP event	Boolean
ClosedAllDay	0 or 1 to signify if the Building is closed	Boolean
OpenTime	Time Building Opens	DateTime
CloseTime	Time Building Closes	DateTime
GroupTypeDescription	Group Type Description	String
EventTypeDescription	Event Type Description	String
Contact	Contact Name	String
AltContact	Alternate Contact Name	String
BookingID	Booking ID	Integer

Name	Description	Type
TimeBookingStart	Booking Reserved Start Time	DateTime
TimeBookingEnd	Booking Reserved End Time	DateTime
GMTStartTime	Booking Reserved GMT Start Time	DateTime
GMTEndTime	Booking Reserved GMT End Time	DateTime
TimeZone	Time Zone abbreviation	String
BuildingCode	Building Code	String
Building	Building Description	String
RoomCode	Room Code	String
Room	Room	String
RoomID	Room ID	Integer
BuildingID	Building ID	Integer
RoomTypeID	Room Type ID	Integer
RoomType	Room Type	String
HVACZone	Room HVAC Zone	String

Name	Description	Type
StatusID	Status ID	Integer
StatusTypeID	Status Type: -14 = Booked Space, -11 = Info Only, -13 = Wait, -12 = Cancel	Integer
EventTypeID	Event Type ID	Integer
GroupTypeID	Group Type ID	Integer
DateAdded	Date/Time Booking Added	DateTime
AddedBy	Booking Added By	String
DateChanged	Date/Time Booking Changed	DateTime
ChangedBy	Booking Changed By	String
ContactEmailAddress	Contact email address	String
CheckedIn	0 or 1 to signify Checked in or not	Boolean

History (one for each change for the above booking for the time period).

Name	Description	Type
Date	Date and time of change	DateTime
ChangedBy	Booking changed by	String

Name	Description	Type
Field	Field that changed	String
OldValue	Old value	String
NewValue	New value	String
ID	Booking ID	Integer

## Sample Code

```
Private Sub GetBookings()  
    Dim dvwStatuses, dvwEventTypes, dvwGroupTypes As DataView  
    Dim gintRooms As New Generic.List(Of Int32)  
    Dim gintStatuses As New Generic.List(Of Int32)  
    Dim gintEventTypes As New Generic.List(Of Int32)  
    Dim gintGroupTypes As New Generic.List(Of Int32)  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New StringReader(svc.GetStatuses("UserID", "Password"))  
  
    gintRooms.Add(3271)
```

```
dvwStatuses = Me.GetData(objReader)

objReader = New StringReader(svc.GetEventTypes("UserID", "Password"))
dvwEventTypes = Me.GetData(objReader)

objReader = New StringReader(svc.GetGroupTypes("UserID", "Password"))
dvwGroupTypes = Me.GetData(objReader)

For Each drv As DataRowView In dvwStatuses
    gintStatuses.Add(drv("ID"))
Next

For Each drv As DataRowView In dvwEventTypes
    gintEventTypes.Add(drv("ID"))
Next

For Each drv As DataRowView In dvwGroupTypes
    gintGroupTypes.Add(drv("ID"))
```

Next

```
Dim strRooms As New EMSAPI.ArrayOfInt  
Dim strStatuses As New EMSAPI.ArrayOfInt  
Dim strEventTypes As New EMSAPI.ArrayOfInt  
Dim strGroupTypes As New EMSAPI.ArrayOfInt
```

```
strRooms.AddRange(gintRooms.ToArray)  
strStatuses.AddRange(gintStatuses.ToArray)  
strEventTypes.AddRange(gintEventTypes.ToArray)  
strGroupTypes.AddRange(gintGroupTypes.ToArray)
```

```
objReader = New StringReader(svc.GetChangedBookings("UserID", "Password", Date.Today,  
Date.Today, strRooms, strStatuses, strEventTypes, strGroupTypes, False))
```

```
Dim dst As New DataSet("Data")  
dst.ReadXml(objReader)
```

End Sub

## Example Response

```
<BookingHistory>
<Data>
  <BookingDate>2009-10-04T00:00:00</BookingDate>
  <StartBookingDate>2009-10-04T00:00:00</StartBookingDate>
  <RoomDescription>DEN Room 101</RoomDescription>
  <TimeEventStart>2009-10-04T16:00:00</TimeEventStart>
  <TimeEventEnd>2009-10-04T17:00:00</TimeEventEnd>
  <GroupName>ABC Company </GroupName>
  <EventName>Spring Conference</EventName>
  <SetupTypeDescription>U - Shape</SetupTypeDescription>
  <SetupCount>50</SetupCount>
  <ReservationID>6650</ReservationID>
  <EventCoordinator />
  <GroupID>499</GroupID>
  <VIP xml:space="preserve">
  </VIP>
  <VIPEvent>false</VIPEvent>
  <ClosedAllDay>false</ClosedAllDay>
```

```
<OpenTime>1900-01-01T00:00:00</OpenTime>
<CloseTime>1900-01-01T00:00:00</CloseTime>
<GroupTypeDescription>Corporate</GroupTypeDescription>
<EventTypeDescription>Conference</EventTypeDescription>
<Contact>Jim Smith</Contact>
<AltContact />
<BookingID>222008</BookingID>
<TimeBookingStart>2009-10-04T16:00:00</TimeBookingStart>
<TimeBookingEnd>2009-10-04T17:00:00</TimeBookingEnd>
<GMTStartTime>2009-10-04T22:00:00</GMTStartTime>
<GMTEndTime>2009-10-04T23:00:00</GMTEndTime>
<TimeZone>MT</TimeZone>
<BuildingCode>DEN</BuildingCode>
<Building>Denver</Building>
<RoomCode>RM101</RoomCode>
<Room>Room 101</Room>
<RoomID>3271</RoomID>
<BuildingID>1</BuildingID>
<RoomTypeID>1</RoomTypeID>
```



```
<RoomType>Classroom</RoomType>
<HVACZone/>
<StatusID>1</StatusID>
<StatusTypeID>-14</StatusTypeID>
<EventTypeID>4</EventTypeID>
<GroupTypeID>3</GroupTypeID>
<DateAdded>2009-10-04T16:00:00</DateAdded>
<AddedBy>User 1</AddedBy>
<DateChanged>2009-10-04T16:00:00</DateChanged>
<ChangedBy>User 1</ChangedBy>
<ContactEmailAddress>test@test.com</ContactEmailAddress>
<CheckedIn>>false</CheckedIn>

</Data>

<Data1>

    <Date>2016-10-27T09:26:23.183</Date>
    <ChangedBy>User 1</ChangedBy>
    <Field>Room</Field>
    <OldValue>Room 1</OldValue>
    <NewValue>Room 2</NewValue>
```

```
<ID>222008</ID>
```

```
</Data1>
```

```
</BookingHistory>
```

## GetBookings

### Description

Returns a list of bookings based on filters provided.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
StartDate	Start Date	DateTime
EndDate	End Date	DateTime
Buildings	List of Building IDs	Array Of Integers
Statuses	List of Status IDs	Array Of Integers
EventTypes	List of Event Type IDs	Array Of Integers

Name	Description	Type
GroupTypes	List of Group Type IDs	Array Of Integers
ViewComboRoomComponents	Option to see bookings in components of combo rooms if bookings are in combo rooms	Boolean

## Response Elements

Name	Description	Type
BookingDate	Date that booking is reserved to start on	DateTime
StartBookingDate	Date that booking event starts on	DateTime
RoomDescription	Location Description	String
TimeEventStart	Booking Event Start Time	DateTime
TimeEventEnd	Booking Event End Time	DateTime
GroupName	Group/Customer name	String
EventName	Event Name	String
SetupTypeDescription	Setup Type Description	String
SetupCount	Setup Count	Integer

Name	Description	Type
ReservationID	Reservation ID	Integer
EventCoordinator	Initials of Event Coordinator	String
GroupID	Group/Customer ID	Integer
VIP	'VIP' or empty string to signify a VIP event	String
VIPEvent	0 or 1 to signify a VIP event	Boolean
ClosedAllDay	0 or 1 to signify if the Building is closed	Boolean
OpenTime	Time Building Opens	DateTime
CloseTime	Time Building Closes	DateTime
GroupTypeDescription	Group Type Description	String
EventTypeDescription	Event Type Description	String
Contact	Contact Name	String
AltContact	Alternate Contact Name	String
BookingID	Booking ID	Integer
BuildingID	Building ID	Integer

Name	Description	Type
TimeBookingStart	Booking Reserved Start Time	DateTime
TimeBookingEnd	Booking Reserved End Time	DateTime
GMTStartTime	Booking Reserved GMT Start Time	DateTime
GMTEndTime	Booking Reserved GMT End Time	DateTime
TimeZone	Time Zone abbreviation	String
BuildingCode	Building Code	String
Building	Building Description	String
RoomCode	Room Code	String
Room	Room	String
RoomID	Room ID	Integer
BuildingID	Building ID	Integer
RoomTypeID	Room Type ID	Integer
RoomType	Room Type	String
HVACZone	Room HVAC Zone	String

Name	Description	Type
StatusID	Status ID	Integer
StatusTypeID	Status Type: -14 = Booked Space, -11 = Info Only, -13 = Wait, -12 = Cancel	Integer
EventTypeID	Event Type ID	Integer
GroupTypeID	Group Type ID	Integer
DateAdded	Date/Time Booking Added	DateTime
AddedBy	Booking Added By	String
DateChanged	Date/Time Booking Changed	DateTime
ChangedBy	Booking Changed By	String
ContactEmailAddress	Contact Email Address	String
CheckedIn	0 or 1 to signify Checked in or not	Boolean

## Sample Code

```
Private Sub GetBookings()
    Dim dvwBuildings, dvwStatuses, dvwEventTypes, dvwGroupTypes As DataView
    Dim gintBuildings As New Generic.List(Of Int32)
    Dim gintStatuses As New Generic.List(Of Int32)
```

```
Dim gintEventTypes As New Generic.List(Of Int32)
Dim gintGroupTypes As New Generic.List(Of Int32)

Dim svc As New EMSAPI.ServiceSoapClient
Dim objReader As New StringReader(svc.GetBuildings("UserID", "Password"))

dvwBuildings = Me.GetData(objReader)

objReader = New StringReader(svc.GetStatuses("UserID", "Password"))
dvwStatuses = Me.GetData(objReader)

objReader = New StringReader(svc.GetEventTypes("UserID", "Password"))
dvwEventTypes = Me.GetData(objReader)

objReader = New StringReader(svc.GetGroupTypes
("UserID", "Password"))
dvwGroupTypes = Me.GetData(objReader)

For Each drv As DataRowView In dvwBuildings
    gintBuildings.Add(drv("ID"))
```

```
Next
```

```
For Each drv As DataRowView In dvwStatuses  
    gintStatuses.Add(drv("ID"))
```

```
Next
```

```
For Each drv As DataRowView In dvwEventTypes  
    gintEventTypes.Add(drv("ID"))
```

```
Next
```

```
For Each drv As DataRowView In dvwGroupTypes  
    gintGroupTypes.Add(drv("ID"))
```

```
Next
```

```
Dim strBuildings As New EMSAPI.ArrayOfInt  
Dim strStatuses As New EMSAPI.ArrayOfInt  
Dim strEventTypes As New EMSAPI.ArrayOfInt  
Dim strGroupTypes As New EMSAPI.ArrayOfInt
```



```
strBuildings.AddRange(gintBuildings.ToArray)
strStatuses.AddRange(gintStatuses.ToArray)
strEventTypes.AddRange(gintEventTypes.ToArray)
strGroupTypes.AddRange(gintGroupTypes.ToArray)

objReader = New StringReader(svc.GetBookings
("UserID", "Password", Date.Today, Date.Today,
strBuildings, strStatuses, strEventTypes, strGroupTypes, False))

Dim dst As New DataSet("Data")
dst.ReadXml(objReader)
```

End Sub

## Example Response

```
<Bookings>
<Data>
  <BookingDate>2009-10-04T00:00:00</BookingDate>
  <StartBookingDate>2009-10-04T00:00:00</StartBookingDate>
  <RoomDescription>DEN Room 101</RoomDescription>
  <TimeEventStart>2009-10-04T16:00:00</TimeEventStart>
```

```
<TimeEventEnd>2009-10-04T17:00:00</TimeEventEnd>
<GroupName>ABC Company </GroupName>
<EventName>Spring Conference</EventName>
<SetupTypeDescription>U - Shape</SetupTypeDescription>
<SetupCount>50</SetupCount>
<ReservationID>6650</ReservationID>
<EventCoordinator />
<GroupID>499</GroupID>
<VIP xml:space="preserve">
</VIP>
<VIPEvent>false</VIPEvent>
<ClosedAllDay>false</ClosedAllDay>
<OpenTime>1900-01-01T00:00:00</OpenTime>
<CloseTime>1900-01-01T00:00:00</CloseTime>
<GroupTypeDescription>Corporate</GroupTypeDescription>
<EventTypeDescription>Conference</EventTypeDescription>
<Contact>Jim Smith</Contact>
<AltContact />
<BookingID>222008</BookingID>
```

```
<TimeBookingStart>2009-10-04T16:00:00</TimeBookingStart>
<TimeBookingEnd>2009-10-04T17:00:00</TimeBookingEnd>
<GMTStartTime>2009-10-04T22:00:00</GMTStartTime>
<GMTEndTime>2009-10-04T23:00:00</GMTEndTime>
<TimeZone>MT</TimeZone>
<BuildingCode>DEN</BuildingCode>
<Building>Denver</Building>
<RoomCode>RM101</RoomCode>
<Room>Room 101</Room>
<RoomID>3271</RoomID>
<BuildingID>1</BuildingID>
<RoomTypeID>1</RoomTypeID>
<RoomType>Classroom</RoomType>
<HVACZone/>
<StatusID>1</StatusID>
<StatusTypeID>-14</StatusTypeID>
<EventTypeID>4</EventTypeID>
<GroupTypeID>3</GroupTypeID>
<DateAdded>2009-10-04T16:00:00</DateAdded>
```

```
<AddedBy>User 1</AddedBy>
<DateChanged>2009-10-04T16:00:00</DateChanged>
<ChangedBy>User 1</ChangedBy>
  <ContactEmailAddress>jsmith@test.com</ContactEmailAddress>
<CheckedIn>>false</CheckedIn>
</Data>
</Bookings>
```

## GetBookings2

### Description

Returns a list of bookings based on filters provided and Reservation ID.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
ReservationID	Reservation ID	Integer
StartDate	Start Date	DateTime

Name	Description	Type
EndDate	End Date	DateTime
Buildings	List of Building IDs	Array Of Integers
Statuses	List of Status IDs	Array Of Integers
EventTypes	List of Event Type IDs	Array Of Integers
GroupTypes	List of Group Type IDs	Array Of Integers
ViewComboRoomComponents	Option to see bookings in components of combo rooms if bookings are in combo rooms	Boolean

## Response Elements

Name	Description	Type
BookingDate	Date that booking is reserved to start on	DateTime
StartBookingDate	Date that booking event starts on	DateTime
RoomDescription	Location Description	String
TimeEventStart	Booking Event Start Time	DateTime
TimeEventEnd	Booking Event End Time	DateTime

Name	Description	Type
GroupName	Group/Customer name	String
EventName	Event Name	String
SetupTypeDescription	Setup Type Description	String
SetupCount	Setup Count	Integer
ReservationID	Reservation ID	Integer
EventCoordinator	Initials of Event Coordinator	String
GroupID	Group/Customer ID	Integer
VIP	'VIP' or empty string to signify a VIP event	String
VIPEvent	0 or 1 to signify a VIP event	Boolean
ClosedAllDay	0 or 1 to signify if the Building is closed	Boolean
OpenTime	Time Building Opens	DateTime
CloseTime	Time Building Closes	DateTime
GroupTypeDescription	Group Type Description	String
EventTypeDescription	Event Type Description	String

Name	Description	Type
Contact	Contact Name	String
AltContact	Alternate Contact Name	String
BookingID	Booking ID	Integer
BuildingID	Building ID	Integer
TimeBookingStart	Booking Reserved Start Time	DateTime
TimeBookingEnd	Booking Reserved End Time	DateTime
GMTStartTime	Booking Reserved GMT Start Time	DateTime
GMTEndTime	Booking Reserved GMT End Time	DateTime
TimeZone	Time Zone abbreviation	String
BuildingCode	Building Code	String
Building	Building Description	String
RoomCode	Room Code	String
Room	Room	String
RoomID	Room ID	Integer

Name	Description	Type
BuildingID	Building ID	Integer
RoomTypeID	Room Type ID	Integer
RoomType	Room Type	String
HVACZone	Room HVAC Zone	String
StatusID	Status ID	Integer
StatusTypeID	Status Type: -14 = Booked Space, -11 = Info Only, -13 = Wait, -12 = Cancel	Integer
EventTypeID	Event Type ID	Integer
GroupTypeID	Group Type ID	Integer
DateAdded	Date/Time Booking Added	DateTime
AddedBy	Booking Added By	String
DateChanged	Date/Time Booking Changed	DateTime
ChangedBy	Booking Changed By	String
ContactEmailAddress	Contact Email Address	String
CheckedIn	0 or 1 to signify Checked in or not	Boolean



## Sample Code

```
Private Sub GetBookings2()  
  
    Dim dvwBuildings, dvwStatuses, dvwEventTypes,  
        dvwGroupTypes As DataView  
  
    Dim gintBuildings As New Generic.List(Of Int32)  
  
    Dim gintStatuses As New Generic.List(Of Int32)  
  
    Dim gintEventTypes As New Generic.List(Of Int32)  
  
    Dim gintGroupTypes As New Generic.List(Of Int32)  
  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New StringReader(svc.GetBuildings  
        ("UserID", "Password"))  
  
  
    dvwBuildings = Me.GetData(objReader)  
  
  
    objReader = New StringReader(svc.GetStatuses  
        ("UserID", "Password"))  
  
    dvwStatuses = Me.GetData(objReader)
```

```
objReader = New StringReader(svc.GetEventTypes  
("UserID", "Password"))
```

```
dvwEventTypes = Me.GetData(objReader)
```

```
objReader = New StringReader(svc.GetGroupTypes  
("UserID", "Password"))
```

```
dvwGroupTypes = Me.GetData(objReader)
```

```
For Each drv As DataRowView In dvwBuildings  
    gintBuildings.Add(drv("ID"))
```

```
Next
```

```
For Each drv As DataRowView In dvwStatuses  
    gintStatuses.Add(drv("ID"))
```

```
Next
```

```
For Each drv As DataRowView In dvwEventTypes  
    gintEventTypes.Add(drv("ID"))
```

```
Next
```

```
For Each drv As DataRowView In dvwGroupTypes
    gintGroupTypes.Add(drv("ID"))
Next

Dim strBuildings As New EMSAPI.ArrayOfInt
Dim strStatuses As New EMSAPI.ArrayOfInt
Dim strEventTypes As New EMSAPI.ArrayOfInt
Dim strGroupTypes As New EMSAPI.ArrayOfInt

strBuildings.AddRange(gintBuildings.ToArray)
strStatuses.AddRange(gintStatuses.ToArray)
strEventTypes.AddRange(gintEventTypes.ToArray)
strGroupTypes.AddRange(gintGroupTypes.ToArray)

objReader = New StringReader(svc.GetBookings2("UserID",
"Password", 6650, Date.Today, Date.Today, strBuildings,
strStatuses, strEventTypes, strGroupTypes, False))

Dim dst As New DataSet("Data")

dst.ReadXml(objReader)
```

End Sub

## Example Response

<Bookings>

<Data>

```
<BookingDate>2009-10-04T00:00:00</BookingDate>
<StartBookingDate>2009-10-04T00:00:00</StartBookingDate>
<RoomDescription>DEN Room 101</RoomDescription>
<TimeEventStart>2009-10-04T16:00:00</TimeEventStart>
<TimeEventEnd>2009-10-04T17:00:00</TimeEventEnd>
<GroupName>ABC Company </GroupName>
<EventName>Spring Conference</EventName>
<SetupTypeDescription>U - Shape</SetupTypeDescription>
<SetupCount>50</SetupCount>
<ReservationID>6650</ReservationID>
<EventCoordinator />
<GroupID>499</GroupID>
<VIP xml:space="preserve">
</VIP>
<VIPEvent>false</VIPEvent>
```

```
<ClosedAllDay>false</ClosedAllDay>
<OpenTime>1900-01-01T00:00:00</OpenTime>
<CloseTime>1900-01-01T00:00:00</CloseTime>
<GroupTypeDescription>Corporate</GroupTypeDescription>
<EventTypeDescription>Conference</EventTypeDescription>
<Contact>Jim Smith</Contact>
<AltContact />
<BookingID>222008</BookingID>
<TimeBookingStart>2009-10-04T16:00:00</TimeBookingStart>
<TimeBookingEnd>2009-10-04T17:00:00</TimeBookingEnd>
<GMTStartTime>2009-10-04T22:00:00</GMTStartTime>
<GMTEndTime>2009-10-04T23:00:00</GMTEndTime>
<TimeZone>MT</TimeZone>
<BuildingCode>DEN</BuildingCode>
<Building>Denver</Building>
<RoomCode>RM101</RoomCode>
<Room>Room 101</Room>
<RoomID>3271</RoomID>
<BuildingID>1</BuildingID>
```

```
<RoomTypeID>1</RoomTypeID>
<RoomType>Classroom</RoomType>
<HVACZone/>
<StatusID>1</StatusID>
<StatusTypeID>-14</StatusTypeID>
<EventTypeID>4</EventTypeID>
<GroupTypeID>3</GroupTypeID>
<DateAdded>2009-10-04T16:00:00</DateAdded>
<AddedBy>User 1</AddedBy>
<DateChanged>2009-10-04T16:00:00</DateChanged>
<ChangedBy>User 1</ChangedBy>
    <ContactEmailAddress>jsmith@test.com</ContactEmailAddress>
<CheckedIn>>false</CheckedIn>
</Data>
</Bookings>
```

## GetBookings3

### Description

Returns a list of bookings that occurs (starts and/or ends) within a date range based on filters provided.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
ReservationID	Reservation ID	Integer
StartDate	Start Date	DateTime
EndDate	End Date	DateTime
Buildings	List of Building IDs	Array Of Integers
Statuses	List of Status IDs	Array Of Integers
EventTypes	List of Event Type IDs	Array Of Integers
GroupTypes	List of Group Type IDs	Array Of Integers
ViewComboRoomComponents	Option to see bookings in components of combo rooms if bookings are in combo rooms	Boolean

## Response Elements

Name	Description	Type
BookingDate	Date that booking is reserved to start on	DateTime

Name	Description	Type
StartBookingDate	Date that booking event starts on	DateTime
RoomDescription	Location Description	String
TimeEventStart	Booking Event Start Time	DateTime
TimeEventEnd	Booking Event End Time	DateTime
GroupName	Group/Customer name	String
EventName	Event Name	String
SetupTypeDescription	Setup Type Description	String
SetupCount	Setup Count	Integer
ReservationID	Reservation ID	Integer
EventCoordinator	Initials of Event Coordinator	String
GroupID	Group/Customer ID	Integer
VIP	'VIP' or empty string to signify a VIP event	String
VIPEvent	0 or 1 to signify a VIP event	Boolean
ClosedAllDay	0 or 1 to signify if the Building is closed	Boolean



Name	Description	Type
OpenTime	Time Building Opens	DateTime
CloseTime	Time Building Closes	DateTime
GroupTypeDescription	Group Type Description	String
EventTypeDescription	Event Type Description	String
Contact	Contact Name	String
AltContact	Alternate Contact Name	String
BookingID	Booking ID	Integer
BuildingID	Building ID	Integer
TimeBookingStart	Booking Reserved Start Time	DateTime
TimeBookingEnd	Booking Reserved End Time	DateTime
GMTStartTime	Booking Reserved GMT Start Time	DateTime
GMTEndTime	Booking Reserved GMT End Time	DateTime
TimeZone	Time Zone abbreviation	String
BuildingCode	Building Code	String

Name	Description	Type
Building	Building Description	String
RoomCode	Room Code	String
Room	Room	String
RoomID	Room ID	Integer
BuildingID	Building ID	Integer
RoomTypeID	Room Type ID	Integer
RoomType	Room Type	String
HVACZone	Room HVAC Zone	String
StatusID	Status ID	Integer
StatusTypeID	Status Type: -14 = Booked Space, -11 = Info Only, -13 = Wait, -12 = Cancel	Integer
EventTypeID	Event Type ID	Integer
GroupTypeID	Group Type ID	Integer
DateAdded	Date/Time Booking Added	DateTime
AddedBy	Booking Added By	String

Name	Description	Type
DateChanged	Date/Time Booking Changed	DateTime
ChangedBy	Booking Changed By	String
ContactEmailAddress	Contact Email Address	String
CheckedIn	0 or 1 to signify Checked in or not	Boolean

## Sample Code

```
Private Sub GetBookings2()  
    Dim dvwBuildings, dvwStatuses, dvwEventTypes,  
        dvwGroupTypes As DataView  
  
    Dim gintBuildings As New Generic.List(Of Int32)  
    Dim gintStatuses As New Generic.List(Of Int32)  
    Dim gintEventTypes As New Generic.List(Of Int32)  
    Dim gintGroupTypes As New Generic.List(Of Int32)  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New StringReader(svc.GetBuildings  
        ("UserID", "Password"))
```

```
dvwBuildings = Me.GetData(objReader)

objReader = New StringReader(svc.GetStatuses
("UserID", "Password"))
dvwStatuses = Me.GetData(objReader)

objReader = New StringReader(svc.GetEventTypes
("UserID", "Password"))
dvwEventTypes = Me.GetData(objReader)

objReader = New StringReader(svc.GetGroupTypes
("UserID", "Password"))
dvwGroupTypes = Me.GetData(objReader)

For Each drv As DataRowView In dvwBuildings
    gintBuildings.Add(drv("ID"))
Next

For Each drv As DataRowView In dvwStatuses
    gintStatuses.Add(drv("ID"))
```

```
Next
```

```
For Each drv As DataRowView In dvwEventTypes  
    gintEventTypes.Add(drv("ID"))
```

```
Next
```

```
For Each drv As DataRowView In dvwGroupTypes  
    gintGroupTypes.Add(drv("ID"))
```

```
Next
```

```
Dim strBuildings As New EMSAPI.ArrayOfInt
```

```
Dim strStatuses As New EMSAPI.ArrayOfInt
```

```
Dim strEventTypes As New EMSAPI.ArrayOfInt
```

```
Dim strGroupTypes As New EMSAPI.ArrayOfInt
```

```
strBuildings.AddRange(gintBuildings.ToArray)
```

```
strStatuses.AddRange(gintStatuses.ToArray)
```

```
strEventTypes.AddRange(gintEventTypes.ToArray)
```

```
strGroupTypes.AddRange(gintGroupTypes.ToArray)
```

```
objReader = New StringReader(svc.GetBookings2("UserID",  
"Password", 6650, Date.Today, Date.Today, strBuildings, strStatuses, strEventTypes,  
strGroupTypes, False))
```

```
Dim dst As New DataSet("Data")
```

```
dst.ReadXml(objReader)
```

```
End Sub
```

## Example Response

```
<Bookings>
```

```
<Data>
```

```
<BookingDate>2009-10-04T00:00:00</BookingDate>
```

```
<StartBookingDate>2009-10-04T00:00:00</StartBookingDate>
```

```
<RoomDescription>DEN Room 101</RoomDescription>
```

```
<TimeEventStart>2009-10-04T16:00:00</TimeEventStart>
```

```
<TimeEventEnd>2009-10-04T17:00:00</TimeEventEnd>
```

```
<GroupName>ABC Company </GroupName>
```

```
<EventName>Spring Conference</EventName>
```

```
<SetupTypeDescription>U - Shape</SetupTypeDescription>
```

```
<SetupCount>50</SetupCount>
<ReservationID>6650</ReservationID>
<EventCoordinator />
<GroupID>499</GroupID>
<VIP xml:space="preserve">
</VIP>
<VIPEvent>false</VIPEvent>
<ClosedAllDay>false</ClosedAllDay>
<OpenTime>1900-01-01T00:00:00</OpenTime>
<CloseTime>1900-01-01T00:00:00</CloseTime>
<GroupTypeDescription>Corporate</GroupTypeDescription>
<EventTypeDescription>Conference</EventTypeDescription>
<Contact>Jim Smith</Contact>
<AltContact />
<BookingID>222008</BookingID>
<TimeBookingStart>2009-10-04T16:00:00</TimeBookingStart>
<TimeBookingEnd>2009-10-04T17:00:00</TimeBookingEnd>
<GMTStartTime>2009-10-04T22:00:00</GMTStartTime>
<GMTEndTime>2009-10-04T23:00:00</GMTEndTime>
```

```
<TimeZone>MT</TimeZone>
<BuildingCode>DEN</BuildingCode>
<Building>Denver</Building>
<RoomCode>RM101</RoomCode>
<Room>Room 101</Room>
<RoomID>3271</RoomID>
<BuildingID>1</BuildingID>
<RoomTypeID>1</RoomTypeID>
<RoomType>Classroom</RoomType>
<HVACZone/>
<StatusID>1</StatusID>
<StatusTypeID>-14</StatusTypeID>
<EventTypeID>4</EventTypeID>
<GroupTypeID>3</GroupTypeID>
<DateAdded>2009-10-04T16:00:00</DateAdded>
<AddedBy>User 1</AddedBy>
<DateChanged>2009-10-04T16:00:00</DateChanged>
<ChangedBy>User 1</ChangedBy>
    <ContactEmailAddress>jsmith@test.com</ContactEmailAddress>
<CheckedIn>>false</CheckedIn>
```



&lt;/Data&gt;

&lt;/Bookings&gt;

## GetBuildingHolidays

### Description

Returns a list of holidays for a specific date.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
Buildings	List of Building IDs	Array of Integers
HolidayDate	Date	DateTime

### Response Elements

Name	Description	Type
BuildingID	BuildingID (-1 = All Buildings)	Integer

Name	Description	Type
HolidayDecription	Holiday Description	String
HolidayNotes	Holiday Notes	String
DisplayOnWeb	Display on Web	Boolean

## Sample Code

```
Private Sub GetBuildingHolidays()  
Dim dvwBuildings As DataView  
    Dim gintBuildings As New Generic.List(Of Int32)  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New StringReader(svc.GetBuildings  
        ("UserID", "Password"))  
  
    dvwBuildings = Me.GetData(objReader)  
  
    For Each drv As DataRowView In dvwBuildings  
        gintBuildings.Add(drv("ID"))  
    Next
```

```
Dim strBuildings As New EMSAPI.ArrayOfInt

strBuildings.AddRange(gintBuildings.ToArray)

objReader = New System.IO.StringReader(svc. GetBuildingHolidays
("UserID", "Password", strBuildings, Date.Today))

Dim dst As New DataSet("Data")

dst.ReadXml(objReader)
```

```
End Sub
```

Example Response

```
<Holidays>
<Data>
<BuildingID>141</BuildingID>
<HolidayDescription>Independence Day</HolidayDescription>
<DisplayOnWeb>true</DisplayOnWeb>
</Data>
<Data>
<BuildingID>142</BuildingID>
<HolidayDescription>Independence Day</HolidayDescription>
<DisplayOnWeb>true</DisplayOnWeb>
```

```
</Data>  
<Data>  
<BuildingID>143</BuildingID>  
<HolidayDescription>Independence Day</HolidayDescription>  
<DisplayOnWeb>true</DisplayOnWeb>  
</Data>  
</Holidays>
```

## GetBuildingHours

### Description

Returns a list of building hours for a specific date.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
Buildings	List of Building IDs	Array of Integers
BuildingHoursDate	Date	DateTime

## Response Elements

Name	Description	Type
BuildingID	BuildingID	Integer
OpenTime	Building Open Time	DateTime
CloseTime	Building Close Time	DateTime
ClosedAllDay	Closed All Day	Boolean
HolidayBuilding	Building Holiday	Boolean

## Sample Code

```
Private Sub GetBuildingHours()  
Dim dvwBuildings As DataView  
    Dim gintBuildings As New Generic.List(Of Int32)  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New StringReader(svc.GetBuildings  
        ("UserID", "Password"))  
  
    dvwBuildings = Me.GetData(objReader)
```

```
For Each drv As DataRowView In dvwBuildings
    gintBuildings.Add(drv("ID"))
Next

Dim strBuildings As New EMSAPI.ArrayOfInt

strBuildings.AddRange(gintBuildings.ToArray)
objReader = New System.IO.StringReader(svc. GetBuidlingHours
    ("UserID", "Password", strBuildings, Date.Today))
Dim dst As New DataSet("Data")
dst.ReadXml(objReader)

End Sub
```

## Example Response

```
<BuildingHours>
<Data>

    <BuildingID>141</BuildingID>
    <OpenTime>1900-01-01T05:00:00</OpenTime>
    <CloseTime>1900-01-01T19:00:00</CloseTime>
```

```
<ClosedAllDay>false</ClosedAllDay>
<HolidayBuilding>false</HolidayBuilding>
</Data>
<Data>
  <BuildingID>142</BuildingID>
  <OpenTime>1900-01-01T05:00:00</OpenTime>
  <CloseTime>1900-01-01T19:00:00</CloseTime>
  <ClosedAllDay>false</ClosedAllDay>
  <HolidayBuilding>false</HolidayBuilding>
</Data>
<Data>
  <BuildingID>143</BuildingID>
  <OpenTime>1900-01-01T05:00:00</OpenTime>
  <CloseTime>1900-01-01T19:00:00</CloseTime>
  <ClosedAllDay>false</ClosedAllDay>
  <HolidayBuilding>false</HolidayBuilding>
</Data>
</BuildingHours>
```

## GetBuildings

### Description

Returns a list of buildings.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String

### Response Elements

Name	Description	Type
Description	Building Description	String
BuildingCode	Building Code	String
ID	Building ID	Integer
TimeZoneDescription	Time Zone Description	String
TimeZoneAbbreviation	Time Zone Abbreviation	String



Name	Description	Type
CurrentLocalTime	Current Local Time	DateTime

## Sample Code

```
Private Sub GetBuildings()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader  
        (svc.GetBuildings("UserID", "Password"))  
    Dim dst As New DataSet("Data")  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Buildings>  
<Data>  
    <Description>Denver</Description>  
    <ID>1</ID>  
    <TimeZoneDescription>Mountain Time</TimeZoneDescription>  
    <TimeZoneAbbreviation>MT</TimeZoneAbbreviation>
```

```
<CurrentLocalTime>2012-04-13T07:47:12.503</CurrentLocalTime>
</Data>
<Data>
<Description>Mountain</Description>
<ID>2</ID>
<TimeZoneDescription>Mountain Time</TimeZoneDescription>
<TimeZoneAbbreviation>MT</TimeZoneAbbreviation>
<CurrentLocalTime>2012-04-13T07:47:12.503</CurrentLocalTime>
</Data>
</Buildings>
```

## GetCategories

### Description


This API retrieves EMS category information. By passing a building parameter, it will only return categories valid for the building ID entered.


### Request Parameters

Name	Description	Type
UserName	EMS User Name	String

Name	Description	Type
Password	EMS User Password	String
BuildingID	EMS category ID for which to return active resources	Integer

## Response Elements

Name	Description	Type
CategoryID	Category ID	Integer
CategoryDescription	Category Friendly Name	String
UseCutOff	Indicates if there a cut-off when this category can no longer be added	Boolean
CutOffTime	<p>Indicates the time of day (along with number of days specified in CutOffDays) this category can be added to bookings. (local time to the facility being booked) –</p> <div data-bbox="535 966 1333 1128">  <p><b>Note:</b> This is always used in conjunction with CutOffDays</p> </div>	Datetime
CutOffDays	Indicates after how many days prior to booking date this category can no longer be added to bookings. (local to the facility being booked)	Datetime

Name	Description	Type
	 <b>Note:</b> This is always used in conjunction with CutOffTime – Date & Time	
CutOffHours	Indicates how many hours prior to the booking start time this category can no longer be added	Integer
PONumberRequired	Indicates whether a PO number is required to order items from this category	Boolean
BillingReferenceRequired	Indicates whether a billing reference number is required to order items from this category	Boolean
CurrencySymbol	Indicates which currency symbol is applicable for resources in this category	String
UseStates	Indicates whether this category uses states to define the current state of a service order	Boolean
DefaultStateID	Indicates the default state ID to be assigned to new service orders that have not specified another state.	Integer

## Sample Code

```
Private Sub GetCategories()  
    Dim svc As New EMSAPI.ServiceSoapClient
```

```
Dim objReader As New System.IO.StringReader  
    (svc.GetCategories("UserID", "Password", 1))  
  
Dim dst As New DataSet("Data")  
  
dst.ReadXml(objReader)
```

```
End Sub
```

## Example Response

```
<Categories>
```

```
<Data>
```

```
    <CategoryID>1</CategoryID>  
    <CategoryDescription>Mountain Time</CategoryDescription>  
    <UseCutOff>true</UseCutOff>  
    <CutOffTime>2012-04-13T07:47:12.503</CutOffTime>  
    <CutOffDays>2012-04-13T07:47:12.503</CutOffDays>  
    <CutOffHours>1</CutOffHours>  
    <PONumberRequired>1</PONumberRequired>  
    <BillingReferenceRequired>1</BillingReferenceRequired>  
    <CurrencySymbol>Dollar</CurrencySymbol>  
    <UseStates>false</UseStates>  
    <DefaultStateID>1</DefaultStateID>
```

```
</Data>  
</Categories>
```

## GetCategoryStates

### Description

This API retrieves EMS category state information. By passing a category parameter, it will only return categories valid for the building ID entered.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
CategoryID	EMS category ID for which to return active resources	Integer

### Response Elements

Name	Description	Type
ID	ID	Integer
Description	Description of Category State	String

Name	Description	Type
HighlightColor	RGB Color Value for State	String

## Sample Code

```
Private Sub GetCategoryStates()  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
        (svc.GetCategoryStates("UserID", "Password", 1))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<CategoryState>  
<Data>  
    <ID>1</ID>  
    <Description>Mountain Time</Description>  
    <HighlightColor>true</HighlightColor>  
</Data>
```

&lt;/CategoryState&gt;

## GetChangedBookings

### Description

Returns a list of bookings based on filters provided.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
StartDate	Start Date (DateChanged on tblBooking)	DateTime
EndDate	End Date (DateChanged on tblBooking)	DateTime
Rooms	List of Room IDs	Array Of Integers
Statuses	List of Status IDs	Array Of Integers
EventTypes	List of Event Type IDs	Array Of Integers
GroupTypes	List of Group Type IDs	Array Of Integers
ViewComboRoomComponents	Option to see bookings in components of combo rooms if bookings are in combo rooms	Boolean



## Response Elements

Name	Description	Type
BookingDate	Booking Date based on reserved time	DateTime
StartBookingDate	Booking Date based on event time	DateTime
RoomDescription	Location Description	String
TimeEventStart	Booking Event Start Time	DateTime
TimeEventEnd	Booking Event End Time	DateTime
GroupName	Group/Customer name	String
EventName	Event Name	String
SetupTypeDescription	Setup Type Description	String
SetupCount	Setup Count	Integer
ReservationID	Reservation ID	Integer
EventCoordinator	Initials of Event Coordinator	String
GroupID	Group/Customer ID	Integer
VIP	'VIP' or empty string to signify a VIP event	String

Name	Description	Type
VIPEvent	0 or 1 to signify a VIP event	Boolean
ClosedAllDay	0 or 1 to signify if the Building is closed	Boolean
OpenTime	Time Building Opens	DateTime
CloseTime	Time Building Closes	DateTime
GroupTypeDescription	Group Type Description	String
EventTypeDescription	Event Type Description	String
Contact	Contact Name	String
AltContact	Alternate Contact Name	String
BookingID	Booking ID	Integer
BuildingID	Building ID	Integer
TimeBookingStart	Booking Reserved Start Time	DateTime
TimeBookingEnd	Booking Reserved End Time	DateTime
GMTStartTime	Booking Reserved GMT Start Time	DateTime
GMTEndTime	Booking Reserved GMT End Time	DateTime

Name	Description	Type
TimeZone	Time Zone abbreviation	String
BuildingCode	Building Code	String
Building	Building Description	String
RoomCode	Room Code	String
Room	Room	String
RoomID	Room ID	Integer
BuildingID	Building ID	Integer
RoomTypeID	Room Type ID	Integer
RoomType	Room Type	String
HVACZone	Room HVAC Zone	String
StatusID	Status ID	Integer
StatusTypeID	Status Type: -14 = Booked Space, -11 = Info Only, -13 = Wait, -12 = Cancel	Integer
EventTypeID	Event Type ID	Integer
GroupTypeID	Group Type ID	Integer

Name	Description	Type
DateAdded	Date/Time Booking Added	DateTime
AddedBy	Booking Added By	String
DateChanged	Date/Time Booking Changed	DateTime
ChangedBy	Booking Changed By	String
CheckedIn	0 or 1 to signify Checked in or not	Boolean

## Sample Code

```
Private Sub GetBookings()  
    Dim dvwStatuses, dvwEventTypes, dvwGroupTypes As DataView  
    Dim gintRooms As New Generic.List(Of Int32)  
    Dim gintStatuses As New Generic.List(Of Int32)  
    Dim gintEventTypes As New Generic.List(Of Int32)  
    Dim gintGroupTypes As New Generic.List(Of Int32)  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New StringReader(svc.GetStatuses  
        ("UserID", "Password"))
```

```
gintRooms.Add(3271)

dvwStatuses = Me.GetData(objReader)

objReader = New StringReader(svc.GetEventTypes
("UserID", "Password"))
dvwEventTypes = Me.GetData(objReader)

objReader = New StringReader(svc.GetGroupTypes
("UserID", "Password"))
dvwGroupTypes = Me.GetData(objReader)

For Each drv As DataRowView In dvwStatuses
    gintStatuses.Add(drv("ID"))
Next

For Each drv As DataRowView In dvwEventTypes
    gintEventTypes.Add(drv("ID"))
Next
```

```
For Each drv As DataRowView In dvwGroupTypes
    gintGroupTypes.Add(drv("ID"))
Next
```

```
Dim strRooms As New EMSAPI.ArrayOfInt
Dim strStatuses As New EMSAPI.ArrayOfInt
Dim strEventTypes As New EMSAPI.ArrayOfInt
Dim strGroupTypes As New EMSAPI.ArrayOfInt
```

```
strRooms.AddRange(gintRooms.ToArray)
strStatuses.AddRange(gintStatuses.ToArray)
strEventTypes.AddRange(gintEventTypes.ToArray)
strGroupTypes.AddRange(gintGroupTypes.ToArray)
```

```
objReader = New StringReader(svc.GetChangedBookings("UserID",
"Password", Date.Today, Date.Today, strRooms, strStatuses, strEventTypes, strGroupTypes,
False))
```

```
Dim dst As New DataSet("Data")
```

```
dst.ReadXml(objReader)
```

```
End Sub
```

## Example Response

```
<Bookings>
```

```
<Data>
```

```
  <BookingDate>2009-10-04T00:00:00</BookingDate>
  <StartBookingDate>2009-10-04T00:00:00</StartBookingDate>
  <RoomDescription>DEN Room 101</RoomDescription>
  <TimeEventStart>2009-10-04T16:00:00</TimeEventStart>
  <TimeEventEnd>2009-10-04T17:00:00</TimeEventEnd>
  <GroupName>ABC Company </GroupName>
  <EventName>Spring Conference</EventName>
  <SetupTypeDescription>U - Shape</SetupTypeDescription>
  <SetupCount>50</SetupCount>
  <ReservationID>6650</ReservationID>
  <EventCoordinator />
  <GroupID>499</GroupID>
  <VIP xml:space="preserve">
</VIP>
```

```
<VIPEvent>false</VIPEvent>
<ClosedAllDay>false</ClosedAllDay>
<OpenTime>1900-01-01T00:00:00</OpenTime>
<CloseTime>1900-01-01T00:00:00</CloseTime>
<GroupTypeDescription>Corporate</GroupTypeDescription>
<EventTypeDescription>Conference</EventTypeDescription>
<Contact>Jim Smith</Contact>
<AltContact />
<BookingID>222008</BookingID>
<TimeBookingStart>2009-10-04T16:00:00</TimeBookingStart>
<TimeBookingEnd>2009-10-04T17:00:00</TimeBookingEnd>
<GMTStartTime>2009-10-04T22:00:00</GMTStartTime>
<GMTEndTime>2009-10-04T23:00:00</GMTEndTime>
<TimeZone>MT</TimeZone>
<BuildingCode>DEN</BuildingCode>
<Building>Denver</Building>
<RoomCode>RM101</RoomCode>
<Room>Room 101</Room>
<RoomID>3271</RoomID>
```



```
<BuildingID>1</BuildingID>
<RoomTypeID>1</RoomTypeID>
<RoomType>Classroom</RoomType>
<HVACZone/>
<StatusID>1</StatusID>
<StatusTypeID>-14</StatusTypeID>
<EventTypeID>4</EventTypeID>
<GroupTypeID>3</GroupTypeID>
<DateAdded>2009-10-04T16:00:00</DateAdded>
<AddedBy>User 1</AddedBy>
<DateChanged>2009-10-04T16:00:00</DateChanged>
<ChangedBy>User 1</ChangedBy>
<CheckedIn>>false</CheckedIn>

</Data>
</Bookings>
```

## GetComboRoomComponents

### Description

Returns component room details for a specific combo room.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
RoomID	Room ID	Integer

## Response Elements

Name	Description	Type
Room	Room Code	String
Description	Room Description	String
Building	Building	String
Floor	Floor Description	String
Type	Room Type	String
Classification	Room Classification	String
Phone	Room Phone	String
Notes	Room Notes	String

Name	Description	Type
RoomSize	Room Size	Integer
SetupHours	Room Setup Hours	Decimal
TeardownHours	Room Teardown Hours	Decimal
HVACZone	Room HVAC Zone	String
URL	Room URL	String

## Sample Code

```
Private Sub GetComboRoomComponents()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader  
        (svc.GetComboRoomComponents("UserID",  
        "Password", 3272))  
    Dim dst As New DataSet("Data")  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<RoomComponents>
```

```
<Data>
  <Room>RM 102</Room>
  <Description>Room 102</Description>
  <Building>Denver</Building>
  <Floor>1st Floor</Floor>
  <Type>Meeting Room</Type>
  <Classification>Standard</Classification>
  <Phone>x456</Phone>
  <Notes />
  <RoomSize>10</RoomSize>
  <SetupHours>0</SetupHours>
  <TeardownHours>0</TeardownHours>
  <HVACZone />
  <URL />
</Data>
</RoomComponents>
```

## GetCommentTypes

### Description

Returns a list of comment types.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String

### Response Elements

Name	Description	Type
Description	Comment Type Description	String
ID	Comment Type ID	Integer
Comments	Default Comments	String

### Sample Code

```
Private Sub GetCommentTypes()
```

```
Dim svc As New EMSAPI.ServiceSoapClient
Dim objReader As New System.IO.StringReader
(svc.GetCommentTypes("UserID", "Password"))
Dim dst As New DataSet("Data")
dst.ReadXml(objReader)

End Sub
```

## Example Response

```
<CommentTypes>
<Data>
  <Description>(user specified comment)</Description>
  <ID>-38</ID>
  <Comments/>
</Data>
<Data>
  <Description>Res. Comments</Description>
  <ID>2</ID>
  <Comments>test comments</Comments>
</Data>
</CommentTypes>
```

## GetContactDetails

### Description

Returns details for a specific contact.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
ContactID	Contact ID	Integer

### Response Elements

Name	Description	Type
Contact	Contact Name	String
GroupName	Group Name	String
Address1	Address Line 1	String
Address2	Address Line 2	String

Name	Description	Type
City	City	String
State	State	String
ZipCode	Zip Code	String
Country	Country	String
Phone	Phone	String
Fax	Fax	String
EmailAddress	Email Address	String
ExternalReference	External Reference	String
GroupID	Group ID	Integer

## Sample Code

```
Private Sub GetContactDetails()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader  
    (svc.GetContactDetails("UserID",  
        "Password", 12345))  
    Dim dst As New DataSet("Data")
```



```
dst.ReadXml (objReader)
```

```
End Sub
```

## Example Response

```
<ContactDetails>
```

```
<Data>
```

```
    <Contact>Test Contact</Contact>
```

```
    <GroupName>Text Group</GroupName>
```

```
    <Address1>123 Main St.</Address1>
```

```
    <Address2/>
```

```
    <City>Denver</City>
```

```
    <State>CO</State>
```

```
    <ZipCode>80111</ZipCode>
```

```
    <Country />
```

```
    <Phone>x123</Phone>
```

```
    <Fax />
```

```
    <EmailAddress>testcontact@test.com</EmailAddress>
```

```
    <ExternalReference />
```

```
    <GroupID>1234</GroupID>
```

```
</Data>
```

&lt;/ContactDetails&gt;

## GetContacts

### Description

Returns a contact list for a Group.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
GroupID	Group ID	Integer

### Response Elements

Name	Description	Type
ContactID	Contact ID	Integer
Contact	Contact Name	String
GroupName	Group Name	String

Name	Description	Type
Address1	Address Line 1	String
Address2	Address Line 2	String
City	City	String
State	State	String
ZipCode	Zip Code	String
Country	Country	String
Phone	Phone	String
Fax	Fax	String
EmailAddress	Email Address	String
ExternalReference	External Reference	String

## Sample Code

```
Private Sub GetContacts()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader  
    (svc.GetContacts("UserID", "Password", 1234))
```

```
        Dim dst As New DataSet("Data")  
        dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Contacts>  
<Data>  
    <ContactID>12345</ContactID>  
<Contact>Test Contact</Contact>  
<GroupName>Text Group</GroupName>  
<Address1>123 Main St.</Address1>  
<Address2/>  
<City>Denver</City>  
<State>CO</State>  
<ZipCode>80111</ZipCode>  
<Country />  
<Phone>x123</Phone>  
<Fax />  
<EmailAddress>testcontact@test.com</EmailAddress>  
<ExternalReference />
```

&lt;/Data&gt;

&lt;/Contacts&gt;

## GetCourseBookings

### Description

Returns a list of bookings tied to courses based on filters provided.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
StartDate	Start Date	DateTime
EndDate	End Date	DateTime
Buildings	List of Building IDs	Array Of Integers
Statuses	List of Status IDs	Array Of Integers
EventTypes	List of Event Type IDs	Array Of

Name	Description	Type
		Integers
ViewComboRoomComponents	Option to see bookings in components of combo rooms if bookings are in combo rooms	Boolean

## Response Elements

Name	Description	Type
BookingDate	Date that booking is reserved to start on	DateTime
StartBookingDate	Date that booking event starts on	DateTime
RoomDescription	Location Description	String
TimeEventStart	Booking Event Start Time	DateTime
TimeEventEnd	Booking Event End Time	DateTime
GroupName	Group/Customer name	String
EventName	Event Name	String
ReservationID	Reservation ID	Integer

Name	Description	Type
GroupID	Group/Customer ID	Integer
GroupTypeDescription	Group Type Description	String
EventTypeDescription	Event Type Description	String
Contact	Contact Name	String
AltContact	Alternate Contact Name	String
BookingID	Booking ID	Integer
TimeBookingStart	Booking Reserved Start Time	DateTime
TimeBookingEnd	Booking Reserved End Time	DateTime
GMTStartTime	Booking Reserved GMT Start Time	DateTime
GMTEndTime	Booking Reserved GMT End Time	DateTime
TimeZone	Time Zone abbreviation	String
BuildingCode	Building Code	String
Building	Building Description	String
RoomCode	Room Code	String

Name	Description	Type
Room	Room	String
RoomID	Room ID	Integer
BuildingID	Building ID	Integer
StatusID	Status ID	Integer
StatusTypeID	Status Type: -14 = Booked Space, -11 = Info Only, -13 = Wait, -12 = Cancel	Integer
EventTypeID	Event Type ID	Integer
GroupTypeID	Group Type ID	Integer
RoomTypeID	Room Type ID	Integer
RoomType	Room Type	String
DateAdded	Date/Time Booking Added	DateTime
TermCode	Term Code	String
CRN	Course CRN	String
SubjectCode	Subject Code	String



Name	Description	Type
Course	Course	String
Section	Section	String
CourseTitle	Course Title	String
DateAdded	Date/Time Booking Added	DateTime
AddedBy	Booking Added By	String
DateChanged	Date/Time Booking Changed	DateTime
ChangedBy	Booking Changed By	String
ContactEmailAddress	Contact Email Address	String

## Sample Code

```
Private Sub GetBookings()
    Dim dvwBuildings, dvwStatuses, dvwEventTypes
    As DataView

    Dim gintBuildings As New Generic.List(Of Int32)
    Dim gintStatuses As New Generic.List(Of Int32)
    Dim gintEventTypes As New Generic.List(Of Int32)
```

```
Dim svc As New EMSAPI.ServiceSoapClient

Dim objReader As New StringReader
(svc.GetBuildings("UserID", "Password"))

dvwBuildings = Me.GetData(objReader)

objReader = New StringReader(svc.GetStatuses
("UserID", "Password"))
dvwStatuses = Me.GetData(objReader)

objReader = New StringReader(svc.GetEventTypes
("UserID", "Password"))
dvwEventTypes = Me.GetData(objReader)

For Each drv As DataRowView In dvwBuildings
    gintBuildings.Add(drv("ID"))
Next

For Each drv As DataRowView In dvwStatuses
    gintStatuses.Add(drv("ID"))
```

```
Next

For Each drv As DataRowView In dvwEventTypes
    gintEventTypes.Add(drv("ID"))
Next

Dim strBuildings As New EMSAPI.ArrayOfInt
Dim strStatuses As New EMSAPI.ArrayOfInt
Dim strEventTypes As New EMSAPI.ArrayOfInt

strBuildings.AddRange(gintBuildings.ToArray)
strStatuses.AddRange(gintStatuses.ToArray)
strEventTypes.AddRange(gintEventTypes.ToArray)

objReader = New StringReader(svc.GetCourseBookings("UserID",
"Password", Date.Today, Date.Today, strBuildings, strStatuses,
strEventTypes, False))

Dim dst As New DataSet("Data")
dst.ReadXml(objReader)
```

End Sub

## Example Response

```
<CourseBookings>
<Data>
  <BookingDate>2009-10-04T00:00:00</BookingDate>
  <StartBookingDate>2009-10-04T00:00:00</StartBookingDate>
  <RoomDescription>DEN Room 101</RoomDescription>
  <TimeEventStart>2009-10-04T16:00:00</TimeEventStart>
  <TimeEventEnd>2009-10-04T17:00:00</TimeEventEnd>
  <GroupName>ABC Company </GroupName>
  <EventName>Spring Conference</EventName>
  <ReservationID>6650</ReservationID>
  <GroupID>499</GroupID>
  <GroupTypeDescription>Corporate</GroupTypeDescription>
  <EventTypeDescription>Conference</EventTypeDescription>
  <Contact>Jim Smith</Contact>
  <AltContact />
  <BookingID>222008</BookingID>
  <TimeBookingStart>2009-10-04T16:00:00</TimeBookingStart>
```

```
<TimeBookingEnd>2009-10-04T17:00:00</TimeBookingEnd>
<GMTStartTime>2009-10-04T22:00:00</GMTStartTime>
<GMTEndTime>2009-10-04T23:00:00</GMTEndTime>
<TimeZone>MT</TimeZone>
<BuildingCode>DEN</BuildingCode>
<Building>Denver</Building>
<RoomCode>RM101</RoomCode>
<Room>Room 101</RoomCode>
<RoomID>3271</RoomID>
<BuildingID>1</BuildingID>
<StatusID>1</StatusID>
<StatusTypeID>-14</StatusTypeID>
<EventTypeID>4</EventTypeID>
<GroupTypeID>3</GroupTypeID>
<RoomTypeID>1</RoomTypeID>
<RoomType>Classroom</RoomType>
<TermCode>Fall 2012</TermCode>
<CRN>10101</CRN>
<SubjectCode>ACCT</SubjectCode>
```

```
<Course>101</Course>
<Section>01</Section>
<CourseTitle>Accounting Course</CourseTitle>
<DateAdded>2009-10-04T16:00:00</DateAdded>
<AddedBy>User 1</AddedBy>
<DateChanged>2009-10-04T16:00:00</DateChanged>
<ChangedBy>User 1</ChangedBy>
  <ContactEmailAddress>jsmith@test.com</ContactEmailAddress>
</Data>
</CourseBookings>
```

## GetEventTypes

### Description

Returns a list of event types.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String

## Response Elements

Name	Description	Type
Description	Event Type Description	String
ID	Event Type ID	Integer
DisplayOnWeb	Display On Web Flag	Boolean

## Sample Code

```
Private Sub GetEventTypes()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader  
        (svc.GetEventTypes("UserID", "Password"))  
    Dim dst As New DataSet("Data")  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<EventTypes>  
  
<Data>
```

```
<Description>(none)</Description>
<ID>0</ID>
<DisplayOnWeb>true</DisplayOnWeb>
</Data>
<Data>
<Description>Meeting</Description>
<ID>2</ID>
<DisplayOnWeb>true</DisplayOnWeb>
</Data>
<Data>
<Description>Inactive</Description>
<ID>3</ID>
<DisplayOnWeb>true</DisplayOnWeb>
</Data>
</EventTypes>
```

## GetFeatures

### Description

Returns a list of Features.



## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
BuildingID	Building ID (-1 = All Buildings)	Integer

## Response Elements

Name	Description	Type
Description	Description	String
ID	ID	Integer

## Sample Code

```
Private Sub GetFeatures()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader  
        (svc.GetFeatures("UserID", "Password", 1))  
    Dim dst As New DataSet("Data")
```

```
dst.ReadXml (objReader)
```

```
End Sub
```

## Example Response

```
<Features>  
<Data>  
    <Description>Whiteboard</Description>  
<ID>1</ID>  
</Data>  
<Data>  
    <Description>Projector</Description>  
<ID>2</ID>  
</Data>  
</Features>
```

## GetGroupBookings

### Description

Returns a list of bookings for a group based on filters provided.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
StartDate	Start Date	DateTime
EndDate	End Date	DateTime
GroupID	Group ID	Integer
Statuses	List of Status IDs	Array Of Integers
StatusTypes	List of Status Types	Array Of Integers
ViewComboRoomComponents	Option to see bookings in components of combo rooms if bookings are in combo rooms	Boolean

## Response Elements

Name	Description	Type
ReservationID	Reservation ID	Integer
BookingID	Booking ID	Integer
BookingDate	Date that booking is reserved to start on	DateTime
StartBookingDate	Date that booking event starts on	DateTime
TimeEventStart	Booking Event Start Time	DateTime
TimeEventEnd	Booking Event End Time	DateTime
GMTEventStart	Booking GMT Event Start Time	DateTime
GMTEventEnd	Booking GMT Event End Time	DateTime
TimeBookingStart	Booking Reserved Start Time	DateTime
TimeBookingEnd	Booking Reserved End Time	DateTime
GMTBookingStart	Booking GMT Reserved Start Time	DateTime
GMTBookingEnd	Booking GMT Reserved End Time	DateTime
EventName	Event Name	String

Name	Description	Type
BuildingID	Building ID	Integer
BuildingCode	Building Code	String
Building	Building Description	String
TimeZoneID	Time Zone ID	Integer
TimeZone	Time Zone abbreviation	String
RoomID	Room ID	Integer
RoomCode	Room Code	String
RoomDescription	Location Description	String
RoomTypeID	Room Type ID	Integer
RoomType	Room Type	String
StatusID	Status ID	Integer
StatusTypeID	Status Type: -14 = Booked Space, -11 = Info Only, -13 = Wait, -12 = Cancel	Integer
StatusDescription	Status Description	String
EventTypeID	Event Type ID	Integer

Name	Description	Type
EventTypeDescription	Event Type Description	String
SetupTypeID	Setup Type ID	Integer
SetupTypeDescription	Setup Type Description	String
SetupCount	Setup Count	Integer
GroupID	Group/Customer ID	Integer
GroupName	Group/Customer name	String
GroupTypeID	Group Type ID	Integer
GroupTypeDescription	Group Type Description	String
Contact1ID	First Contact ID	Integer
Contact1Name	First Contact Name	String
Contact2ID	Second Contact ID	Integer
Contact2Name	Second Contact Name	String
WebProcessTemplateID	Web Process Template ID (0 is none)	Integer
ContactEmailAddress	Contact Email Address	String

Name	Description	Type
CheckedIn	0 or 1 to signify Checked in or not	Boolean

## Sample Code

```
Private Sub GetGroupBookings()  
    Dim dvwStatuses As DataView  
    Dim gintStatuses As New Generic.List(Of Int32)  
    Dim gintStatusTypes As New Generic.List(Of Int32)  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New StringReader(svc.GetStatuses("UserID", "Password"))  
  
    dvwStatuses = Me.GetData(objReader)  
  
    For Each drv As DataRowView In dvwStatuses  
        gintStatuses.Add(drv("ID"))  
    Next  
  
    gintStatusTypes.Add(-14) 'Booked Space
```

```
Dim strStatuses As New EMSAPI.ArrayOfInt
Dim strStatusTypes as New EMSAPI.ArrayOfInt

strStatuses.AddRange(gintStatuses.ToArray)
strStatusTypes.AddRange(gintStatusTypes.ToArray)

        objReader = New StringReader(svc.GetGroupBookings("UserID", "Password",
Date.Today, Date.Today, 499, strStatuses, strStatusTypes, False))

        Dim dst As New DataSet("Data")
        dst.ReadXml(objReader)

End Sub
```

## Example Response

```
<Bookings>
<Data>
<ReservationID>6650</ReservationID>
<BookingID>222008</BookingID>
<BookingDate>2009-10-04T00:00:00</BookingDate>
```



```
<StartBookingDate>2009-10-04T00:00:00</StartBookingDate>
<TimeEventStart>2009-10-04T16:00:00</TimeEventStart>
<TimeEventEnd>2009-10-04T17:00:00</TimeEventEnd>
<GMTEventStart>2009-10-04T22:00:00</GMTEventStart>
<GMTEventEnd>2009-10-04T23:00:00</GMTEventEnd>
<TimeBookingStart>2009-10-04T16:00:00</TimeBookingStart>
<TimeBookingEnd>2009-10-04T17:00:00</TimeBookingEnd>
<GMTBookingStart>2009-10-04T22:00:00</GMTBookingStart>
<GMTBookingEnd>2009-10-04T23:00:00</GMTBookingEnd>
<EventName>Spring Conference</EventName>
<BuildingID>1</BuildingID>
<BuildingCode>DEN</BuildingCode>
<Building>Denver</Building>
<TimeZoneID>68</TimeZoneID>
<TimeZone>MT</TimeZone>
<RoomID>3271</RoomID>
<RoomCode>RM101</RoomCode>
<RoomDescription>Room 101</RoomDescription>
<RoomTypeID>1</RoomTypeID>
```

```
<RoomType>Classroom</RoomType>
<StatusID>1</StatusID>
<StatusTypeID>-14</StatusTypeID>
<StatusDescription>Confirmed</StatusDescription>
<EventTypeID>4</EventTypeID>
<EventTypeDescription>Conference</EventTypeDescription>
<SetupTypeID>1</SetupTypeID>
<SetupTypeDescription>U - Shape</SetupTypeDescription>
<SetupCount>50</SetupCount>
<GroupID>499</GroupID>
<GroupName>ABC Company </GroupName>
<GroupTypeID>3</GroupTypeID>
<GroupTypeDescription>Corporate</GroupTypeDescription>
<Contact1ID>53</Contact1ID>
<Contact1Name>Jim Smith</Contact1Name>
<Contact2ID>-1</Contact2ID>
<Contact2Name/>
<WebProcessTemplateID>2</WebProcessTemplateID>
    <ContactEmailAddress>jsmith@test.com</ContactEmailAddress>
<CheckedIn>>false</CheckedIn>
```

&lt;/Data&gt;

&lt;/Bookings&gt;

## GetGroupDetails

### Description

Returns details for a specific group.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
GroupID	Group ID	Integer

### Response Elements

Name	Description	Type
GroupName	Group Name	String
GroupType	Group Type	String

Name	Description	Type
Address1	Address Line 1	String
Address2	Address Line 2	String
City	City	String
State	State	String
ZipCode	Zip Code	String
Country	Country	String
Phone	Phone	String
Fax	Fax	String
EmailAddress	Email Address	String
ExternalReference	External Reference	String
GroupTypeID	Group Type ID	Integer

## Sample Code

```
Private Sub GetGroupDetails()  
    Dim svc As New EMSAPI.ServiceSoapClient
```

```
Dim objReader As New System.IO.StringReader  
  (svc.GetGroupDetails("UserID", "Password", 1234))  
  
Dim dst As New DataSet("Data")  
  
dst.ReadXml(objReader)
```

```
End Sub
```

## Example Response

```
<GroupDetails>  
<Data>  
<GroupName>Test Group</GroupName>  
<GroupType>(none)</GroupType>  
<Address1>123 Main St.</Address1>  
<Address2/>  
<City>Denver</City>  
<State>CO</State>  
<ZipCode>80111</ZipCode>  
<Country />  
<Phone>x123</Phone>  
<Fax />  
<EmailAddress>testgroup@test.com</EmailAddress>
```

```
<ExternalReference />
<GroupTypeID>0</GroupTypeID>
</Data>
</GroupDetails>
```

## GetGroups

### Description

Returns a list of groups.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
GroupName	Group Name Filter	String
EmailAddress	Email Address Filter	String

## Response Elements

Name	Description	Type
GroupName	GroupName	String
EmailAddress	Email Address	String
ID	Group ID	Integer

## Sample Code

```
Private Sub GetGroups()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader(svc.GetGroups("UserID", "Pass-  
word", "XYZ Co", "xyz@xyz.com"))  
    Dim dst As New DataSet("Data")  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Groups>  
<Data>  
<GroupName>XYZ Company</GroupName>
```

```
<EmailAddress>xyz@xyz.com</EmailAddress>  
<ID>58</ID>  
</Data>  
</Groups>
```

## GetGroupTypes

### Description

Returns a list of group types.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String

### Response Elements

Name	Description	Type
Description	Group Type Description	String



Name	Description	Type
ID	Group Type ID	Integer
AvailableOnWeb	Available On Web Flag	Boolean

## Sample Code

```
Private Sub GetGroupTypes()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader  
        (svc.GetGroupTypes("UserID", "Password"))  
    Dim dst As New DataSet("Data")  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<GroupTypes>  
<Data>  
<Description>(none)</Description>  
<ID>0</ID>  
<AvailableOnWeb>true</AvailableOnWeb>
```

```
</Data>
<Data>
<Description>Big Wigs</Description>
<ID>1</ID>
<AvailableOnWeb>false</AvailableOnWeb>
</Data>
<Data>
<Description>Managers</Description>
<ID>2</ID>
<AvailableOnWeb>true</AvailableOnWeb>
</Data>
</GroupTypes>
```

## GetHVACBookings

### Description

Returns a list of bookings based on filters provided.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
StartDate	Start Date	DateTime
EndDate	End Date	DateTime
Buildings	List of Building IDs	Array Of Integers
Statuses	List of Status IDs	Array Of Integers
EventTypes	List of Event Type IDs	Array Of Integers
GroupTypes	List of Group Type IDs	Array Of Integers
HVACZones	List of HVAC Zones	Array Of Strings
ViewComboRoomComponents	Option to see bookings in components of combo rooms if bookings are in combo rooms	Boolean

## Response Elements

Name	Description	Type
BookingDate	Date that booking is reserved to start on	DateTime
StartBookingDate	Date that booking event starts on	DateTime
RoomDescription	Location Description	String
TimeEventStart	Booking Event Start Time	DateTime
TimeEventEnd	Booking Event End Time	DateTime
GroupName	Group/Customer name	String
EventName	Event Name	String
SetupTypeDescription	Setup Type Description	String
SetupCount	Setup Count	Integer
ReservationID	Reservation ID	Integer
EventCoordinator	Initials of Event Coordinator	String
GroupID	Group/Customer ID	Integer
VIP	'VIP' or empty string to signify a VIP event	String

Name	Description	Type
VIPEvent	0 or 1 to signify a VIP event	Boolean
ClosedAllDay	0 or 1 to signify if the Building is closed	Boolean
OpenTime	Time Building Opens	DateTime
CloseTime	Time Building Closes	DateTime
GroupTypeDescription	Group Type Description	String
EventTypeDescription	Event Type Description	String
Contact	Contact Name	String
AltContact	Alternate Contact Name	String
BookingID	Booking ID	Integer
BuildingID	Building ID	Integer
TimeBookingStart	Booking Reserved Start Time	DateTime
TimeBookingEnd	Booking Reserved End Time	DateTime
GMTStartTime	Booking Reserved GMT Start Time	DateTime
GMTEndTime	Booking Reserved GMT End Time	DateTime

Name	Description	Type
TimeZone	Time Zone abbreviation	String
BuildingCode	Building Code	String
Building	Building Description	String
RoomCode	Room Code	String
Room	Room	String
RoomID	Room ID	Integer
BuildingID	Building ID	Integer
RoomTypeID	Room Type ID	Integer
RoomType	Room Type	String
HVACZone	Room HVAC Zone	String
StatusID	Status ID	Integer
StatusTypeID	Status Type: -14 = Booked Space, -11 = Info Only, -13 = Wait, -12 = Cancel	Integer
EventTypeID	Event Type ID	Integer

Name	Description	Type
GroupTypeID	Group Type ID	Integer
DateAdded	Date/Time Booking Added	DateTime
AddedBy	Booking Added By	String
DateChanged	Date/Time Booking Changed	DateTime
ChangedBy	Booking Changed By	String
ContactEmailAddress	Contact Email Address	String
CheckedIn	0 or 1 to signify Checked in or not	Boolean

## Sample Code

```
Private Sub GetBookings()  
    Dim dvwBuildings, dvwStatuses,  
        dvwEventTypes, dvwGroupTypes As DataView  
  
    Dim gintBuildings As New Generic.List(Of Int32)  
    Dim gintStatuses As New Generic.List(Of Int32)  
    Dim gintEventTypes As New Generic.List(Of Int32)  
    Dim gintGroupTypes As New Generic.List(Of Int32)  
    Dim gintHVACZones As New Generic.List(Of String)
```

```
Dim svc As New EMSAPI.ServiceSoapClient

Dim objReader As New StringReader
(svc.GetBuildings("UserID", "Password"))

dvwBuildings = Me.GetData(objReader)

objReader = New StringReader(svc.GetStatuses
("UserID", "Password"))
dvwStatuses = Me.GetData(objReader)

objReader = New StringReader(svc.GetEventTypes
("UserID", "Password"))
dvwEventTypes = Me.GetData(objReader)

objReader = New StringReader(svc.GetGroupTypes
("UserID", "Password"))
dvwGroupTypes = Me.GetData(objReader)

For Each drv As DataRowView In dvwBuildings
```



```
gintBuildings.Add(drv("ID"))  
  
Next  
  
For Each drv As DataRowView In dvwStatuses  
    gintStatuses.Add(drv("ID"))  
Next  
  
For Each drv As DataRowView In dvwEventTypes  
    gintEventTypes.Add(drv("ID"))  
Next  
  
For Each drv As DataRowView In dvwGroupTypes  
    gintGroupTypes.Add(drv("ID"))  
Next  
  
gintHVACZones.Add(1)  
  
Dim strBuildings As New EMSAPI.ArrayOfInt  
Dim strStatuses As New EMSAPI.ArrayOfInt
```

```
Dim strEventTypes As New EMSAPI.ArrayOfInt
Dim strGroupTypes As New EMSAPI.ArrayOfInt
Dim strHVACZones As New EMSAPI.ArrayOfString

strBuildings.AddRange(gintBuildings.ToArray)
strStatuses.AddRange(gintStatuses.ToArray)
strEventTypes.AddRange(gintEventTypes.ToArray)
strGroupTypes.AddRange(gintGroupTypes.ToArray)
strHVACZones.AddRange(gintHVACZones.ToArray)

objReader = New StringReader(svc.GetBookings("UserID",
"Password", Date.Today, Date.Today, strBuildings, strStatuses,
strEventTypes, strGroupTypes, strHVACZones, False))

Dim dst As New DataSet("Data")

dst.ReadXml(objReader)

End Sub
```

## Example Response

<Bookings>

```
<Data>
<BookingDate>2009-10-04T00:00:00</BookingDate>
<StartBookingDate>2009-10-04T00:00:00</StartBookingDate>
<RoomDescription>DEN Room 101</RoomDescription>
<TimeEventStart>2009-10-04T16:00:00</TimeEventStart>
<TimeEventEnd>2009-10-04T17:00:00</TimeEventEnd>
<GroupName>ABC Company </GroupName>
<EventName>Spring Conference</EventName>
<SetupTypeDescription>U - Shape</SetupTypeDescription>
<SetupCount>50</SetupCount>
<ReservationID>6650</ReservationID>
<EventCoordinator />
<GroupID>499</GroupID>
<VIP xml:space="preserve">
</VIP>
<VIPEvent>false</VIPEvent>
<ClosedAllDay>false</ClosedAllDay>
<OpenTime>1900-01-01T00:00:00</OpenTime>
<CloseTime>1900-01-01T00:00:00</CloseTime>
```

```
<GroupTypeDescription>Corporate</GroupTypeDescription>
<EventTypeDescription>Conference</EventTypeDescription>
<Contact>Jim Smith</Contact>
<AltContact />
<BookingID>222008</BookingID>
<TimeBookingStart>2009-10-04T16:00:00</TimeBookingStart>
<TimeBookingEnd>2009-10-04T17:00:00</TimeBookingEnd>
<GMTStartTime>2009-10-04T22:00:00</GMTStartTime>
<GMTEndTime>2009-10-04T23:00:00</GMTEndTime>
<TimeZone>MT</TimeZone>
<BuildingCode>DEN</BuildingCode>
<Building>Denver</Building>
<RoomCode>RM101</RoomCode>
<Room>Room 101</RoomCode>
<RoomID>3271</RoomID>
<BuildingID>1</BuildingID>
<RoomTypeID>1</RoomTypeID>
<RoomType>Classroom</RoomType>
<HVACZone>1</HVACZone>
```

```
<StatusID>1</StatusID>
<StatusTypeID>-14</StatusTypeID>
<EventTypeID>4</EventTypeID>
<GroupTypeID>3</GroupTypeID>
<DateAdded>2009-10-04T16:00:00</DateAdded>
<AddedBy>User 1</AddedBy>
<DateChanged>2009-10-04T16:00:00</DateChanged>
<ChangedBy>User 1</ChangedBy>
    <ContactEmailAddress>jsmith@test.com</ContactEmailAddress>
<CheckedIn>>false</CheckedIn>
</Data>
</Bookings>
```

## GetPricingMethods

### Description

This API returns active pricing methods to use with Service Order Detail API calls.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String

## Response Elements

Name	Description	Type
PricingMethodID	PricingMethodID	Integer
Description	Description of pricing method	String

## Sample Code

```
Private Sub GetPricingMethods()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader  
        (svc.GetResources("UserID", "Password"))  
    Dim dst As New DataSet("Data")  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<PricingMethods>
<PricingMethods>
<PricingMethodID>1</PricingMethodID>
<Description>wqer asdfpa ahdfppwe oijf hiwer a</Description>
</PricingMethods>
</PricingMethods>
```

## GetReservationComments

### Description

Returns comments list for a reservation.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
ReservationID	Reservation ID	Integer

## Response Elements

Name	Description	Type
CommentID	Comment ID	Integer
CommentTypeID	Comment Type ID	Integer
Comments	Comments	String

## Sample Code

```
Private Sub GetReservationComments()  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
        (svc.GetReservationComments("UserID",  
        "Password", 1234))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<ReservationComments>  
  
<Data>
```



```
<CommentID>1</CommentID>  
<CommentTypeID>2</CommentTypeID>  
<Comments>test Reservation comments</Comments>  
</Data>  
</ReservationComments>
```

## GetReservationSources

### Description

Returns a list of reservation sources.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String

## Response Elements

Name	Description	Type
ReservationSourceID	Reservation Source ID	Integer
ReservationSourceDescription	Reservation Source Description	String

## Sample Code

```
Private Sub GetReservationSources()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader  
        (svc.GetReservationSources("UserID", "Password"))  
    Dim dst As New DataSet("Data")  
    dst.ReadXml(objReader)  
End Sub
```

## Example Response

```
<ReservationSources>  
<Data>  
<ReservationSourceID>1</ReservationSourceID>  
<ReservationSourceDescription>Phone</ReservationSourceDescription>
```

```
</Data>
<Data>
<ReservationSourceID>2</ReservationSourceID>
<ReservationSourceDescription>Email</ReservationSourceDescription>
</Data>
</ReservationSources>
```

## GetResources

### Description

This API returns active resource information for the category entered.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
CategoryID	EMS category ID for which to return active resources	Integer

## Response Elements

Name	Description	Type
GroupingID	Grouping ID for resource	Integer
ResourceID	Resource ID	Integer
GroupingDescription	Resource Grouping Description	String
ResourceDescription	Resource Description	String
Notes	Resource Notes	String
QuantityAvailable	Resource quantity available	Integer
ResourceCategoryTypeCode	Category Type	String

## Sample Code

```
Private Sub GetResources()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader  
        (svc.GetResources("UserID", "Password", 1))  
    Dim dst As New DataSet("Data")  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Resources>
<Data>
<GroupingID>1</GroupingID>
<ResourceID>2</ResourceID>
<GroupingDescription>wqer asdfpa ahdfppwe oijf hiwer a</GroupingDescription>
<ResourceDescription>'asld fasdfjas; fa;sdkf asdf;aksd fas;dfk as;d-
faksjdf</ResourceDescription>
<Notes>as faasfda asd asdf</Notes>
<QuantityAvailable>1</QuantityAvailable>
<ResourceCategoryTypeCode>asd</ResourceCategoryTypeCode>
</Data>
</Resources>
```

## GetRoomAvailability

### Description

Returns whether a room is available or not.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
RoomID	Room ID	Integer
BookingDate	Booking Date to check availability on	DateTime
StartTime	Start Time to check availability	DateTime
EndTime	EndTime to check availability	DateTime

## Response Elements

Name	Description	Type
Available	Room Available	Boolean

## Sample Code

```
Private Sub GetRoomsAvailable()  
    Dim svc As New EMSAPI.ServiceSoapClient
```

```
Dim objReader As New System.IO.StringReader  
    (svc.GetRoomsAvailable("UserID", "Password",  
    3199, Date.Today, CDate("1/1/1900 8:00 AM"),  
    CDate("1/1/1900 9:00 AM")))  
  
Dim dst As New DataSet("Data")  
  
dst.ReadXml(objReader)
```

```
End Sub
```

## Example Response

```
<RoomAvailability>  
<Data>  
<Available>true</Available>  
</Data>  
</RoomAvailability>
```

## GetRoomBookings

### Description

Returns a list of bookings for a specific room based on the filters provided.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
StartDate	Start Date	DateTime
EndDate	End Date	DateTime
RoomID	Room ID	Integer
Statuses	List of Status IDs	Array Of Integers
EventTypes	List of Event Type IDs	Array Of Integers
GroupTypes	List of Group Type IDs	Array Of Integers
ViewComboRoomComponents	Option to see bookings in components of combo rooms if bookings are in combo rooms	Boolean



## Response Elements

Name	Description	Type
BookingDate	Date that booking is reserved to start on	DateTime
StartBookingDate	Date that booking event starts on	DateTime
RoomDescription	Location Description	String
TimeEventStart	Booking Event Start Time	DateTime
TimeEventEnd	Booking Event End Time	DateTime
GroupName	Group/Customer name	String
EventName	Event Name	String
SetupTypeDescription	Setup Type Description	String
SetupCount	Setup Count	Integer
ReservationID	Reservation ID	Integer
EventCoordinator	Initials of Event Coordinator	String
GroupID	Group/Customer ID	Integer
VIP	'VIP' or empty string to signify a VIP event	String

Name	Description	Type
VIPEvent	0 or 1 to signify a VIP event	Boolean
ClosedAllDay	0 or 1 to signify if the Building is closed	Boolean
OpenTime	Time Building Opens	DateTime
CloseTime	Time Building Closes	DateTime
GroupTypeDescription	Group Type Description	String
EventTypeDescription	Event Type Description	String
Contact	Contact Name	String
AltContact	Alternate Contact Name	String
BookingID	Booking ID	Integer
BuildingID	Building ID	Integer
TimeBookingStart	Booking Reserved Start Time	DateTime
TimeBookingEnd	Booking Reserved End Time	DateTime
GMTStartTime	Booking Reserved GMT Start Time	DateTime
GMTEndTime	Booking Reserved GMT End Time	DateTime

Name	Description	Type
TimeZone	Time Zone abbreviation	String
BuildingCode	Building Code	String
Building	Building Description	String
RoomCode	Room Code	String
Room	Room	String
RoomID	Room ID	Integer
BuildingID	Building ID	Integer
StatusID	Status ID	Integer
StatusTypeID	Status Type: -14 = Booked Space, -11 = Info Only, -13 = Wait, -12 = Cancel	Integer
EventTypeID	Event Type ID	Integer
GroupTypeID	Group Type ID	Integer
RoomTypeID	Room Type ID	Integer
RoomType	Room Type	String

Name	Description	Type
DateAdded	Date/Time Booking Added	DateTime
AddedBy	Booking Added By	String
DateChanged	Date/Time Booking Changed	DateTime
ChangedBy	Booking Changed By	String
ContactEmailAddress	Contact Email Address	String
CheckedIn	0 or 1 to signify Checked in or not	Boolean

## Sample Code

```
Private Sub GetBookings()  
    Dim dvwStatuses, dvwEventTypes, dvwGroupTypes As DataView  
    Dim gintStatuses As New Generic.List(Of Int32)  
    Dim gintEventTypes As New Generic.List(Of Int32)  
    Dim gintGroupTypes As New Generic.List(Of Int32)  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New StringReader(svc.GetStatuses("UserID", "Password"))
```

```
dvwStatuses = Me.GetData(objReader)

objReader = New StringReader(svc.GetEventTypes("UserID", "Password"))
dvwEventTypes = Me.GetData(objReader)

objReader = New StringReader(svc.GetGroupTypes("UserID", "Password"))
dvwGroupTypes = Me.GetData(objReader)

For Each drv As DataRowView In dvwStatuses
    gintStatuses.Add(drv("ID"))
Next

For Each drv As DataRowView In dvwEventTypes
    gintEventTypes.Add(drv("ID"))
Next

For Each drv As DataRowView In dvwGroupTypes
    gintGroupTypes.Add(drv("ID"))
Next
```

```
Dim strStatuses As New EMSAPI.ArrayOfInt
Dim strEventTypes As New EMSAPI.ArrayOfInt
Dim strGroupTypes As New EMSAPI.ArrayOfInt

strStatuses.AddRange(gintStatuses.ToArray)
strEventTypes.AddRange(gintEventTypes.ToArray)
strGroupTypes.AddRange(gintGroupTypes.ToArray)

objReader = New StringReader(svc.GetRoomBookings("UserID", "Password", Date.Today,
Date.Today, 3271, strStatuses, strEventTypes, strGroupTypes, False))

Dim dst As New DataSet("Data")
dst.ReadXml(objReader)

End Sub
```

## Example Response

```
<Bookings>
<Data>
<BookingDate>2009-10-04T00:00:00</BookingDate>
```

```
<StartBookingDate>2009-10-04T00:00:00</StartBookingDate>
<RoomDescription>DEN Room 101</RoomDescription>
<TimeEventStart>2009-10-04T16:00:00</TimeEventStart>
<TimeEventEnd>2009-10-04T17:00:00</TimeEventEnd>
<GroupName>ABC Company </GroupName>
<EventName>Spring Conference</EventName>
<SetupTypeDescription>U - Shape</SetupTypeDescription>
<SetupCount>50</SetupCount>
<ReservationID>6650</ReservationID>
<EventCoordinator />
<GroupID>499</GroupID>
<VIP xml:space="preserve">
</VIP>
<VIPEvent>false</VIPEvent>
<ClosedAllDay>false</ClosedAllDay>
<OpenTime>1900-01-01T00:00:00</OpenTime>
<CloseTime>1900-01-01T00:00:00</CloseTime>
<GroupTypeDescription>Corporate</GroupTypeDescription>
<EventTypeDescription>Conference</EventTypeDescription>
```

```
<Contact>Jim Smith</Contact>
<AltContact />
<BookingID>222008</BookingID>
<TimeBookingStart>2009-10-04T16:00:00</TimeBookingStart>
<TimeBookingEnd>2009-10-04T17:00:00</TimeBookingEnd>
<GMTStartTime>2009-10-04T22:00:00</GMTStartTime>
<GMTEndTime>2009-10-04T23:00:00</GMTEndTime>
<TimeZone>MT</TimeZone>
<BuildingCode>DEN</BuildingCode>
<Building>Denver</Building>
<RoomCode>RM101</RoomCode>
<Room>Room 101</RoomCode>
<RoomID>3271</RoomID>
<BuildingID>1</BuildingID>
<StatusID>1</StatusID>
<StatusTypeID>-14</StatusTypeID>
<EventTypeID>4</EventTypeID>
<GroupTypeID>3</GroupTypeID>
<RoomTypeID>1</RoomTypeID>
```



```
<RoomType>Classroom</RoomType>
<DateAdded>2009-10-04T16:00:00</DateAdded>
<AddedBy>User 1</AddedBy>
<DateChanged>2009-10-04T16:00:00</DateChanged>
<ChangedBy>User 1</ChangedBy>
    <ContactEmailAddress>jsmith@test.com</ContactEmailAddress>
<CheckedIn>false</CheckedIn>
</Data>
</Bookings>
```

## GetRoomDetails

### Description

Returns details for a specific room.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
RoomID	Room ID	Integer

## Response Elements

Name	Description	Type
Room	Room Code	String
Description	Room Description	String
Building	Building	String
Floor	Floor Description	String
Type	Room Type	String
Classification	Room Classification	String
Phone	Room Phone	String
Notes	Room Notes	String
RoomSize	Room Size	Integer
SetupHours	Room Setup Hours	Decimal
TeardownHours	Room Teardown Hours	Decimal
HVACZone	Room HVAC Zone	String
URL	Room URL	String

Name	Description	Type
DisplayOnWeb	Display On Web	Boolean
FloorSequence	Floor Sequence	Integer

## Sample Code

```
Private Sub GetRoomDetails()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader(svc.GetRoomDetails("UserID",  
"Password", 3271))  
    Dim dst As New DataSet("Data")  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<RoomDetails>  
<Data>  
<Room>RM 101</Room>  
<Description>Room 101</Description>  
<Building>Denver</Building>
```

```
<Floor>1st Floor</Floor>  
<Type>Meeting Room</Type>  
<Classification>Standard</Classification>  
<Phone>x123</Phone>  
<Notes />  
<RoomSize>20</RoomSize>  
<SetupHours>0</SetupHours>  
<TeardownHours>0</TeardownHours>  
<HVACZone />  
<URL />  
<DisplayOnWeb>1</DisplayOnWeb>  
<FloorSequence>1</FloorSequence>  
</Data>  
</RoomDetails>
```

## GetRooms

### Description

Returns list of rooms for multiple buildings.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
Buildings	List of Building IDs	Array Of Integers

## Response Elements

Name	Description	Type
Room	Room Code	String
Description	Room Description	String
Building	Building	String
Floor	Floor Description	String
Type	Room Type	String
Classification	Room Classification	String
Phone	Room Phone	String
Notes	Room Notes	String

Name	Description	Type
RoomSize	Room Size	Integer
SetupHours	Room Setup Hours	Decimal
TeardownHours	Room Teardown Hours	Decimal
HVACZone	Room HVAC Zone	String
URL	Room URL	String
Active	Room Active	Boolean
BuildingID	Building ID	Integer
ID	Room ID	Integer
ExternalReference	Room External Reference	String
DisplayOnWeb	Room Display On Web	Boolean

## Sample Code

```
Private Sub GetRooms()  
    Dim dvwBuildings As DataView  
    Dim gintBuildings As New Generic.List(Of Int32)  
    Dim svc As New EMSAPI.ServiceSoapClient
```

```
Dim objReader As New StringReader(svc.GetBuildings("UserID", "Password"))

    dvwBuildings = Me.GetData(objReader)

For Each drv As DataRowView In dvwBuildings
    gintBuildings.Add(drv("ID"))
Next

Dim strBuildings As New EMSAPI.ArrayOfInt

strBuildings.AddRange(gintBuildings.ToArray)

objReader = New System.IO.StringReader(svc.GetRooms("UserID", "Password",
strBuildings))

Dim dst As New DataSet("Data")
dst.ReadXml(objReader)

End Sub
```

## Example Response

```
<Rooms>
<Data>
<Room>RM 101</Room>
<Description>Room 101</Description>
<Building>Denver</Building>
<Floor>1st Floor</Floor>
<Type>Meeting Room</Type>
<Classification>Standard</Type>
<Phone>x123</Phone>
<Notes />
<RoomSize>20</RoomSize>
<SetupHours>0</SetupHours>
<TeardownHours>0</TeardownHours>
<HVACZone />
<URL />
<Active>1</Active>
<BuildingID>1</BuildingID>
<ID>3271</ID>
```



```
<ExternalReference />  
<DisplayOnWeb>1</DisplayOnWeb>  
</Data>  
</Rooms>
```

## GetRoomsAvailable

### Description

Returns a list of available rooms.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
BuildingID	Building ID (-1 = All)	Integer
BookingDate	Booking Date to check availability on	DateTime
StartTime	Start Time to check availability	DateTime
EndTime	EndTime to check availability	DateTime

## Response Elements

Name	Description	Type
Room	Room Code	String
Description	Room Description	String
Building	Building	String
RoomID	Room ID	Integer

## Sample Code

```
Private Sub GetRoomAvailability()  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
    (svc.GetRoomAvailability("UserID", "Password",  
    1, Date.Today, CDate("1/1/1900 8:00 AM"),  
    CDate("1/1/1900 9:00 AM")))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<RoomAvailability>
<Data>
<Room>RM 101</Room>
<Description>Room 101</Description>
<Building>Denver</Building>
<RoomID>3271</RoomID>
</Data>
<Data>
<Room>RM 102</Room>
<Description>Room 102</Description>
<Building>Denver</Building>
<RoomID>3272</RoomID>
</Data>
</RoomAvailability>
```

## GetRoomsAvailable2

### Description

Returns a list of available rooms.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
BuildingID	Building ID (-1 = All)	Integer
RoomTypeID	Room Type ID (-1 = All)	Integer
FloorID	Floor ID (-1 = All)	Integer
WebProcessTemplates	List of Web Process Template IDs (-1 = All)	Array Of Integers
StartDateTime	Start Date/Time to check availability	DateTime
EndDateTime	End Date/Time to check availability	DateTime

## Response Elements

Name	Description	Type
RoomID	Room ID	Integer
RoomCode	Room Code	String
RoomDescription	Room Description	String

Name	Description	Type
BuildingID	Building ID	Integer
BuildingDescription	Building Description	String
TimeZoneID	Time Zone ID	Integer
RoomTypeID	Room Type ID	Integer
RoomTypeDescription	Room Type Description	String
TimeZoneDescription	Time Zone Description	String
TimeZoneAbbreviation	Time Zone Abbreviation	String
RecordTypeID	Record Type: 1=Reserve, 2=Request, 3=Both	Integer
FloorID	Floor ID	Integer
FloorDescription	Floor Description	String
FloorSequence	Floor Sequence	Integer
DisplayOnWeb	Display On Web	Boolean
RoomSetupHours	Room Setup Hours	Decimal
RoomTeardownHours	RoomTeardownHours	Decimal

Name	Description	Type
SetupTypeID	Room Default Setup Type ID	Integer
SetupTypeDescription	Default Setup Type Description	String
MinimumCapacity	Minimum Capacity for Default Setup Type	Integer
MaximumCapacity	Maximum Capacity for Default Setup Type	Integer

## Sample Code

```
Private Sub GetRoomAvailability2()
    Dim dvwTemplates As DataView

    Dim gintTemplates As New Generic.List(Of Int32)

    Dim svc As New EMSAPI.ServiceSoapClient

    Dim objReader As New StringReader(svc.GetWebTemplates
    ("UserID", "Password"))

    dvwTemplates= Me.GetData(objReader)

    For Each drv As DataRowView In dvwTemplates
```

```
gintTemplates.Add(drv("ID"))

Next

Dim strTemplates As New EMSAPI.ArrayOfInt

strTemplates.AddRange(gintTemplates.ToArray)

Dim svc As New EMSAPI.ServiceSoapClient

Dim objReader As New System.IO.StringReader
(svc.GetRoomAvailability2("UserID", "Password",
1, -1, -1, strTemplates, CDate("9/1/2014 8:00 AM"),
CDate("9/1/2014 9:00 AM")))

Dim dst As New DataSet("Data")

dst.ReadXml(objReader)

End Sub
```

## Example Response

```
<RoomAvailability>

<Data>

    <RoomID>3271</RoomID>

    <RoomCode>RM 101</RoomCode>
```

```
<RoomDescription>Room 101</RoomDescription>
<BuildingID>1</BuildingID>
<BuildingDescription>Denver</BuildingDescription>
<TimeZoneID>68</TimeZoneID>
<RoomTypeID>1</RoomTypeID>
<RoomTypeDescription>Meeting</RoomTypeDescription>
<TimeZoneDescription>Mountain Time</TimeZoneDescription>
<TimeZoneAbbreviation>MT</TimeZoneAbbreviation>
<RecordTypeID>1</RecordTypeID>
<FloorID>1</FloorID>
<FloorDescription>1st Floor</FloorDescription>
<FloorSequence>0</FloorSequence>
<DisplayOnWeb>true</DisplayOnWeb>
<RoomSetupHours>1.5</RoomSetupHours>
<RoomTeardownHours>1.5</RoomTeardownHours>
<SetupTypeID>0</SetupTypeID>
<SetupTypeDescription>(none)</ SetupTypeDescription>
<MinimumCapacity>0</MinimumCapacity>
<MaximumCapacity>0</MaximumCapacity>
```



```
</Data>
<Data>
    <RoomID>3272</RoomID>
    <RoomCode>RM 102</RoomCode>
    <RoomDescription>Room 102</RoomDescription>
    <BuildingID>1</BuildingID>
    <BuildingDescription>Denver</BuildingDescription>
    <TimeZoneID>68</TimeZoneID>
    <RoomTypeID>1</RoomTypeID>
    <RoomTypeDescription>Meeting</RoomTypeDescription>
    <TimeZoneDescription>Mountain Time</TimeZoneDescription>
    <TimeZoneAbbreviation>MT</TimeZoneAbbreviation>
    <RecordTypeID>3</RecordTypeID>
    <FloorID>1</FloorID>
    <FloorDescription>1st Floor</FloorDescription>
    <FloorSequence>0</FloorSequence>
    <DisplayOnWeb>true</DisplayOnWeb>
    <RoomSetupHours>1.5</RoomSetupHours>
    <RoomTeardownHours>1.5</RoomTeardownHours>
```

```
<SetupTypeID>0</SetupTypeID>  
<SetupTypeDescription>(none)</ SetupTypeDescription>  
<MinimumCapacity>0</MinimumCapacity>  
<MaximumCapacity>0</MaximumCapacity>  
</Data>  
</RoomAvailability>
```

## GetRoomsAvailable3

### Description

Returns a list of available rooms.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
BuildingID	Building ID (-1 = All)	Integer
RoomTypeID	Room Type ID (-1 = All)	Integer

Name	Description	Type
FloorID	Floor ID (-1 = All)	Integer
WebProcessTemplates	List of Web Process Template IDs (-1 = All)	Array Of Integers
Features	List of Feature IDs	Array Of Integers
StartDateTime	Start Date/Time to check availability	DateTime
EndDateTime	End Date/Time to check availability	DateTime

## Response Elements

Name	Description	Type
RoomID	Room ID	Integer
RoomCode	Room Code	String
RoomDescription	Room Description	String
BuildingID	Building ID	Integer
BuildingDescription	Building Description	String
TimeZoneID	Time Zone ID	Integer

Name	Description	Type
RoomTypeID	Room Type ID	Integer
RoomTypeDescription	Room Type Description	String
TimeZoneDescription	Time Zone Description	String
TimeZoneAbbreviation	Time Zone Abbreviation	String
RecordTypeID	Record Type: 1=Reserve, 2=Request, 3=Both	Integer
FloorID	Floor ID	Integer
FloorDescription	Floor Description	String
FloorSequence	Floor Sequence	Integer
DisplayOnWeb	Display On Web	Boolean
RoomSetupHours	Room Setup Hours	Decimal
RoomTeardownHours	RoomTeardownHours	Decimal
SetupTypeID	Room Default Setup Type ID	Integer
SetupTypeDescription	Default Setup Type Description	String
MinimumCapacity	Minimum Capacity for Default Setup Type	Integer

Name	Description	Type
MaximumCapacity	Maximum Capacity for Default Setup Type	Integer

## Sample Code

```
Private Sub GetRoomAvailability3()  
    Dim dvwTemplates As DataView  
    Dim dvwFeatures As DataView  
  
    Dim gintTemplates As New Generic.List(Of Int32)  
    Dim gintFeatures As New Generic.List(Of Int32)  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New StringReader(svc.GetWebTemplates  
    ("UserID", "Password"))  
  
    dvwTemplates= Me.GetData(objReader)  
  
    For Each drv As DataRowView In dvwTemplates  
        gintTemplates.Add(drv("ID"))  
    Next
```

```
Dim strTemplates As New EMSAPI.ArrayOfInt

strTemplates.AddRange(gintTemplates.ToArray)

objReader = New StringReader(svc.GetFeatures
("UserID", "Password", 1))

dvwFeatures = Me.GetData(objReader)

For Each drv As DataRowView In dvwFeatures
    gintFeatures.Add(drv("ID"))
Next

Dim strFeatures As New EMSAPI.ArrayOfInt

strFeatures.AddRange(gintFeatures.ToArray)

Dim svc As New EMSAPI.ServiceSoapClient
```

```
Dim objReader As New System.IO.StringReader
(svc.GetRoomAvailability3("UserID", "Password",
1, -1, -1, strTemplates, strFeatures,
CDate("9/1/2014 8:00 AM"), CDate("9/1/2014 9:00 AM")))

Dim dst As New DataSet("Data")

dst.ReadXml(objReader)
```

End Sub

## Example Response

```
<RoomAvailability>
<Data>
    <RoomID>3271</RoomID>
    <RoomCode>RM 101</RoomCode>
    <RoomDescription>Room 101</RoomDescription>
    <BuildingID>1</BuildingID>
    <BuildingDescription>Denver</BuildingDescription>
    <TimeZoneID>68</TimeZoneID>
    <RoomTypeID>1</RoomTypeID>
    <RoomTypeDescription>Meeting</RoomTypeDescription>
    <TimeZoneDescription>Mountain Time</TimeZoneDescription>
    <TimeZoneAbbreviation>MT</TimeZoneAbbreviation>
```

```
<RecordTypeID>1</RecordTypeID>
<FloorID>1</FloorID>
<FloorDescription>1st Floor</FloorDescription>
<FloorSequence>0</FloorSequence>
<DisplayOnWeb>true</DisplayOnWeb>
<RoomSetupHours>1.5</RoomSetupHours>
<RoomTeardownHours>1.5</RoomTeardownHours>
<SetupTypeID>0</SetupTypeID>
<SetupTypeDescription>(none)</ SetupTypeDescription>
<MinimumCapacity>0</MinimumCapacity>
<MaximumCapacity>0</MaximumCapacity>
</Data>
<Data>
    <RoomID>3272</RoomID>
    <RoomCode>RM 102</RoomCode>
    <RoomDescription>Room 102</RoomDescription>
    <BuildingID>1</BuildingID>
    <BuildingDescription>Denver</BuildingDescription>
    <TimeZoneID>68</TimeZoneID>
```



```
<RoomTypeID>1</RoomTypeID>
<RoomTypeDescription>Meeting</RoomTypeDescription>
<TimeZoneDescription>Mountain Time</TimeZoneDescription>
<TimeZoneAbbreviation>MT</TimeZoneAbbreviation>
<RecordTypeID>3</RecordTypeID>
<FloorID>1</FloorID>
<FloorDescription>1st Floor</FloorDescription>
<FloorSequence>0</FloorSequence>
<DisplayOnWeb>true</DisplayOnWeb>
<RoomSetupHours>1.5</RoomSetupHours>
<RoomTeardownHours>1.5</RoomTeardownHours>
<SetupTypeID>0</SetupTypeID>
<SetupTypeDescription>(none)</ SetupTypeDescription>
<MinimumCapacity>0</MinimumCapacity>
<MaximumCapacity>0</MaximumCapacity>
    </Data>
</RoomAvailability>
```

## GetRoomsAvailable4

### Description

Returns a list of available rooms based on requested setup and capacity.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
BuildingID	Building ID (-1 = All)	Integer
RoomTypeID	Room Type ID (-1 = All)	Integer
FloorID	Floor ID (-1 = All)	Integer
WebProcessTemplates	List of Web Process Template IDs (-1 = All)	Array Of Integers
SetupTypeID	Setup Type ID (-1 = Use Room Default Setup)	Integer
RequestedCapacity	Requested Capacity for Setup Type	Integer
StartDateTime	Start Date/Time to check availability	DateTime
EndDateTime	End Date/Time to check availability	DateTime

## Response Elements

Name	Description	Type
RoomID	Room ID	Integer
RoomCode	Room Code	String
RoomDescription	Room Description	String
BuildingID	Building ID	Integer
BuildingDescription	Building Description	String
TimeZoneID	Time Zone ID	Integer
RoomTypeID	Room Type ID	Integer
RoomTypeDescription	Room Type Description	String
TimeZoneDescription	Time Zone Description	String
TimeZoneAbbreviation	Time Zone Abbreviation	String
RecordTypeID	Record Type: 1=Reserve, 2=Request, 3=Both	Integer
FloorID	Floor ID	Integer
FloorDescription	Floor Description	String

Name	Description	Type
FloorSequence	Floor Sequence	Integer
DisplayOnWeb	Display On Web	Boolean
RoomSetupHours	Room Setup Hours	Decimal
RoomTeardownHours	Room Teardown Hours	Decimal
SetupTypeID	Setup Type ID specified or Room Default Setup Type ID	Integer
SetupTypeDescription	Setup Type Description	String
MinimumCapacity	Minimum Capacity for Setup Type	Integer
MaximumCapacity	Maximum Capacity for Setup Type	Integer
PromptForBillingReference	Prompt for Billing Reference	Boolean

## Sample Code

```
Private Sub GetRoomAvailability4()
    Dim dvwTemplates As DataView
    Dim gintTemplates As New Generic.List(Of Int32)

    Dim svc As New EMSAPI.ServiceSoapClient
```

```
Dim objReader As New StringReader(svc.GetWebTemplates
("UserID", "Password"))

    dvwTemplates= Me.GetData(objReader)

For Each drv As DataRowView In dvwTemplates
    gintTemplates.Add(drv("ID"))
Next

Dim strTemplates As New EMSAPI.ArrayOfInt

strTemplates.AddRange(gintTemplates.ToArray)

Dim svc As New EMSAPI.ServiceSoapClient
Dim objReader As New System.IO.StringReader
(svc.GetRoomAvailability4("UserID", "Password",
1, -1, -1, strTemplates, 1, 10,
CDate("9/1/2014 8:00 AM"), CDate("9/1/2014 9:00 AM"))))
Dim dst As New DataSet("Data")
dst.ReadXml(objReader)

End Sub
```

## Example Response

```
<RoomAvailability>
<Data>
    <RoomID>3271</RoomID>
    <RoomCode>RM 101</RoomCode>
    <RoomDescription>Room 101</RoomDescription>
    <BuildingID>1</BuildingID>
    <BuildingDescription>Denver</BuildingDescription>
    <TimeZoneID>68</TimeZoneID>
    <RoomTypeID>1</RoomTypeID>
    <RoomTypeDescription>Meeting</RoomTypeDescription>
    <TimeZoneDescription>Mountain Time</TimeZoneDescription>
    <TimeZoneAbbreviation>MT</TimeZoneAbbreviation>
    <RecordTypeID>1</RecordTypeID>
    <FloorID>1</FloorID>
    <FloorDescription>1st Floor</FloorDescription>
    <FloorSequence>0</FloorSequence>
    <DisplayOnWeb>true</DisplayOnWeb>
    <RoomSetupHours>1.5</RoomSetupHours>
```

```
<RoomTeardownHours>1.5</RoomTeardownHours>
<SetupTypeID>1</SetupTypeID>
<SetupTypeDescription>Circle</ SetupTypeDescription>
<MinimumCapacity>0</MinimumCapacity>
<MaximumCapacity>20</MaximumCapacity>
<PromptForBillingReference>true</PromptForBillingReference>
</Data>
<Data>
    <RoomID>3272</RoomID>
    <RoomCode>RM 102</RoomCode>
    <RoomDescription>Room 102</RoomDescription>
    <BuildingID>1</BuildingID>
    <BuildingDescription>Denver</BuildingDescription>
    <TimeZoneID>68</TimeZoneID>
    <RoomTypeID>1</RoomTypeID>
    <RoomTypeDescription>Meeting</RoomTypeDescription>
    <TimeZoneDescription>Mountain Time</TimeZoneDescription>
    <TimeZoneAbbreviation>MT</TimeZoneAbbreviation>
    <RecordTypeID>3</RecordTypeID>
```

```
<FloorID>1</FloorID>  
<FloorDescription>1st Floor</FloorDescription>  
<FloorSequence>0</FloorSequence>  
<DisplayOnWeb>true</DisplayOnWeb>  
<RoomSetupHours>1.5</RoomSetupHours>  
<RoomTeardownHours>1.5</RoomTeardownHours>  
<SetupTypeID>1</SetupTypeID>  
<SetupTypeDescription>Circle</ SetupTypeDescription>  
<MinimumCapacity>5</MinimumCapacity>  
<MaximumCapacity>30</MaximumCapacity>  
<PromptForBillingReference>true</PromptForBillingReference>  
</Data>  
</RoomAvailability>
```

## GetRoomsBySetupType

### Description

Returns a list of rooms by setup type and capacity.



## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
BuildingID	Building ID (-1 = All Buildings)	Integer
RoomTypeID	Room Type ID (-1 = All Room Types)	Integer
FloorID	Floor ID (-1 = All Floors)	Integer
SetupTypeID	Setup Type ID	Integer

## Response Elements

Name	Description	Type
RoomID	Room ID	Integer
RoomCode	Room Code	String
RoomDescription	Room Description	String
BuildingID	Building ID	Integer
BuildingDescription	Building Description	String

Name	Description	Type
RoomTypeID	Room Type ID	Integer
RoomTypeDescription	Room Type Description	String
FloorID	Floor ID	Integer
FloorDescription	Floor Description	String
SetupCount	Setup Count	Integer

## Sample Code

```
Private Sub GetRoomsBySetupType()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader  
    (svc.GetRoomsBySetupType("UserID", "Password",  
    1, -1, -1, 10))  
    Dim dst As New DataSet("Data")  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

<Rooms>

```
<Data>

    <RoomID>3271</RoomID>

    <RoomCode>RM 101</RoomCode>

    <RoomDescription>Room 101</RoomDescription>

    <BuildingID>1</BuildingID>

    <BuildingDescription>Denver</BuildingDescription>

    <RoomTypeID>12</RoomTypeID>

    <RoomTypeDescription>Meeting Room</RoomTypeDescription>

    <FloorID>1</FloorID>

    <FloorDescription>1st Floor</FloorDescription>

    <SetupCount>20</SetupCount>

</Data>

<Data>

    <RoomID>3272</RoomID>

    <RoomCode>RM 102</RoomCode>

    <RoomDescription>Room 102</RoomDescription>

    <BuildingID>1</BuildingID>

    <BuildingDescription>Denver</BuildingDescription>

    <RoomTypeID>12</RoomTypeID>
```

```
<RoomTypeDescription>Meeting Room</RoomTypeDescription>  
<FloorID>1</FloorID>  
<FloorDescription>1st Floor</FloorDescription>  
<SetupCount>20</SetupCount>  
</Data>  
</Rooms>
```

## GetRoomTypesByWPT

### Description

Returns list of rooms for multiple web process templates and multiple buildings.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
WebProcessTemplates	List of Web Process Template IDs (-1 = All)	Array Of Integers
Buildings	List of Building IDs (-1 = All)	Array Of Integers

## Response Elements

Name	Description	Type
Type	Room Type Description	String
RoomTypeID	Room Type ID	Integer
FloorID	Floor ID	Integer
FloorDescription	Floor Description	String
BuildingID	Building ID	Integer

## Sample Code

```
Private Sub GetRoomTypesByWPT()  
    Dim dvwBuildings As DataView  
    Dim dvwTemplates As DataView  
  
    Dim gintBuildings As New Generic.List(Of Int32)  
    Dim gintTemplates As New Generic.List(Of Int32)  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New StringReader(svc.GetBuildings("UserID",  
        "Password"))
```

```
        dvwBuildings = Me.GetData(objReader)

objReader = New StringReader(svc.GetWebTemplates("UserID",
"Password"))

        dvwTemplates= Me.GetData(objReader)

For Each drv As DataRowView In dvwBuildings
            gintBuildings.Add(drv("ID"))
Next

For Each drv As DataRowView In dvwTemplates
            gintTemplates.Add(drv("ID"))
Next

Dim strBuildings As New EMSAPI.ArrayOfInt
Dim strTemplates As New EMSAPI.ArrayOfInt

strBuildings.AddRange(gintBuildings.ToArray)
```

```
strTemplates.AddRange(gintTemplates.ToArray)

objReader = New System.IO.StringReader
(svc.GetRoomTypesByWPT("UserID", "Password",
strTemplates, strBuildings))

Dim dst As New DataSet("Data")
dst.ReadXml(objReader)

End Sub
```

## Example Response

```
<RoomTypes>
<Data>
<Type>Meeting</Type>
<RoomTypeID>1</RoomTypeID>
<FloorID>1</FloorID>
<FloorDescription>1st Floor</FloorDescription>
<BuildingID>1</BuildingID>
</Data>
<Data>
```

```
<Type>Conference</Type>
<RoomTypeID>2</RoomTypeID>
<FloorID>1</FloorID>
<FloorDescription>1st Floor</FloorDescription>
<BuildingID>1</BuildingID>
</Data>

</RoomTypes>
```

## GetServiceOrderDetails

### Description

Returns a list of service order details based on filters provided.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
StartDate	Start Date	DateTime



Name	Description	Type
EndDate	End Date	DateTime
Buildings	List of Building IDs	Array Of Integers
Statuses	List of Status IDs	Array Of Integers

## Response Elements

Name	Description	Type
BookingDate	Date that booking is reserved to start on	DateTime
ServiceOrderStartTime	Service Order Start Time	DateTime
ServiceOrderEndTime	Service Order End Time	DateTime
ResourceDescription	Resource Description	String
ResourceExternalReference	Resource External Reference	String
ResourceQuantity	Resource Quantity In Use	Decimal
ServiceOrderID	Service Order ID	Integer
BookingID	Booking ID	Integer

## Sample Code

```
Private Sub GetServiceOrderDetails()  
  
    Dim dvwBuildings, dvwStatuses As DataView  
  
    Dim gintBuildings As New Generic.List(Of Int32)  
  
    Dim gintStatuses As New Generic.List(Of Int32)  
  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New StringReader  
    (svc.GetBuildings("UserID", "Password"))  
  
  
    dvwBuildings = Me.GetData(objReader)  
  
  
    objReader = New StringReader(svc.GetStatuses  
    ("UserID", "Password"))  
  
    dvwStatuses = Me.GetData(objReader)  
  
  
    For Each drv As DataRowView In dvwBuildings  
        gintBuildings.Add(drv("ID"))  
    Next
```

```
For Each drv As DataRowView In dvwStatuses
    gintStatuses.Add(drv("ID"))
Next

Dim strBuildings As New EMSAPI.ArrayOfInt
Dim strStatuses As New EMSAPI.ArrayOfInt

strBuildings.AddRange(gintBuildings.ToArray)
strStatuses.AddRange(gintStatuses.ToArray)

objReader = New StringReader(svc.GetServiceOrderDetails("UserID", "Password", Date.Today,
Date.Today, strBuildings, strStatuses))

Dim dst As New DataSet("Data")
dst.ReadXml(objReader)

End Sub
```

## Example Response

```
<ServiceOrderDetails>
<Data>
```

```
<BookingDate>2012-07-05T00:00:00</BookingDate>
<ServiceOrderStartTime>1900-01-01T08:00:00</ServiceOrderStartTime>
<ServiceOrderEndTime>1900-01-01T09:00:00</ServiceOrderEndTime>
<ResourceDescription>Projector</ ResourceDescription >
<ResourceExternalReference>ABC123</ ResourceExternalReference >
<ResourceQuantity>1</ResourceQuantity>
    <ServiceOrderID>2</ServiceOrderID>
    <BookingID>1</BookingID>
</Data>

<Data>
<BookingDate>2012-07-05T00:00:00</BookingDate>
<ServiceOrderStartTime>1900-01-01T08:00:00</ServiceOrderStartTime>
<ServiceOrderEndTime>1900-01-01T09:00:00</ServiceOrderEndTime>
<ResourceDescription>Whiteboard</ ResourceDescription >
<ResourceExternalReference>XYZ456</ ResourceExternalReference >
<ResourceQuantity>1</ResourceQuantity>
    <ServiceOrderID>2</ServiceOrderID>
    <BookingID>1</BookingID>
</Data>
</ServiceOrderDetails>
```

## GetServiceOrderDetails2

### Description

Returns a list of service order details with production item information based on filters provided.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
StartDate	Start Date	DateTime
EndDate	End Date	DateTime
Buildings	List of Building IDs	Array Of Integers
Statuses	List of Status IDs	Array Of Integers

## Response Elements

Name	Description	Type
BookingDate	Date that booking is reserved to start on	DateTime
ServiceOrderStartTime	Service Order Start Time	DateTime
ServiceOrderEndTime	Service Order End Time	DateTime
ResourceDescription	Resource Description	String
ResourceExternalReference	Resource External Reference	String
ResourceQuantity	Resource Quantity In Use	Decimal
ResourceCategoryName	Category Description	String
ProductionItemQuantity	Production Item Quantity	Decimal
ProductionItemExternalReference	Production Item External Reference	String
ProductionItemDescription	Production Item Description	String
ServiceOrderID	Service Order ID	Integer
BookingID	Booking ID	Integer

## Sample Code

```
Private Sub GetServiceOrderDetails2()  
    Dim dvwBuildings, dvwStatuses As DataView  
    Dim gintBuildings As New Generic.List(Of Int32)  
    Dim gintStatuses As New Generic.List(Of Int32)  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New StringReader  
        (svc.GetBuildings("UserID", "Password"))  
  
    dvwBuildings = Me.GetData(objReader)  
  
    objReader = New StringReader(svc.GetStatuses  
        ("UserID", "Password"))  
    dvwStatuses = Me.GetData(objReader)  
  
    For Each drv As DataRowView In dvwBuildings  
        gintBuildings.Add(drv("ID"))  
    Next
```

```
For Each drv As DataRowView In dvwStatuses
    gintStatuses.Add(drv("ID"))
Next

Dim strBuildings As New EMSAPI.ArrayOfInt
Dim strStatuses As New EMSAPI.ArrayOfInt

strBuildings.AddRange(gintBuildings.ToArray)
strStatuses.AddRange(gintStatuses.ToArray)

objReader = New StringReader(svc.GetServiceOrderDetails2
("UserID", "Password", Date.Today, Date.Today, strBuildings,
strStatuses))

Dim dst As New DataSet("Data")
dst.ReadXml(objReader)

End Sub
```

## Example Response

```
<ServiceOrderDetails>
```



```
<Data>
<BookingDate>2012-07-05T00:00:00</BookingDate>
<ServiceOrderStartTime>1900-01-01T08:00:00</ServiceOrderStartTime>
<ServiceOrderEndTime>1900-01-01T09:00:00</ServiceOrderEndTime>
<ResourceDescription>Continental Breakfast</ ResourceDescription >
<ResourceExternalReference>ABC123</ ResourceExternalReference >
<ResourceQuantity>1</ResourceQuantity>
<ResourceCategoryName>Catering</ResourceCategoryName>
<ProductionItemQuantity>1</ProductionItemQuantity>
<ProductionItemExternalReference>OJ1</ProductionItemExternalReference>
<ProductionItemDescription>Orange Juice</ProductionItemDescription>
    <ServiceOrderID>2</ServiceOrderID>
    <BookingID>1</BookingID>
    </Data>

<Data>
<BookingDate>2012-07-05T00:00:00</BookingDate>
<ServiceOrderStartTime>1900-01-01T08:00:00</ServiceOrderStartTime>
<ServiceOrderEndTime>1900-01-01T09:00:00</ServiceOrderEndTime>
<ResourceDescription>Continental Breakfast</ ResourceDescription >
<ResourceExternalReference>ABC123</ ResourceExternalReference >
```

```
<ResourceQuantity>1</ResourceQuantity>
<ResourceCategoryName>Catering</ResourceCategoryName>
<ProductionItemQuantity>0.5</ProductionItemQuantity>
<ProductionItemExternalReference>DA1</ProductionItemExternalReference>
<ProductionItemDescription>Danish - Assorted</ProductionItemDescription>
    <ServiceOrderID>2</ServiceOrderID>
    <BookingID>1</BookingID>

</Data>
</ServiceOrderDetails>
```

## GetSetupTypes

### Description

Returns a list of setup types.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String

## Response Elements

Name	Description	Type
Description	Setup Type Description	String
ID	Setup Type ID	Integer

## Sample Code

```
Private Sub GetSetupTypes()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader  
        (svc.GetSetupTypes("UserID", "Password"))  
    Dim dst As New DataSet("Data")  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<SetupTypes>  
<Data>  
<Description>(none)</Description>  
<ID>0</ID>
```

```
</Data>
<Data>
<Description>Circle</Description>
<ID>2</ID>
</Data>
<Data>
<Description>Banquet</Description>
<ID>3</ID>
</Data>
</SetupTypes>
```

## GetStatuses

### Description

Returns a list of statuses.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String

Name	Description	Type
Password	EMS User Password	String

## Response Elements

Name	Description	Type
Description	Status Description	String
ID	Status ID	Integer
StatusTypeID	Status Type: -14 = Booked Space, -11 = Info Only, -13 = Wait, -12 = Cancel	Integer
DisplayOnWeb	Display On Web Flag	Boolean

## Sample Code

```
Private Sub GetStatuses()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader  
        (svc.GetStatuses("UserID", "Password"))  
    Dim dst As New DataSet("Data")  
    dst.ReadXml(objReader)
```

End Sub

## Example Response

```
<Statuses>
<Data>
<Description>Confirmed</Description>
<ID>1</ID>
<StatusTypeID>-14</StatusTypeID>
<DisplayOnWeb>true</DisplayOnWeb>
</Data>
<Data>
<Description>Info Only</Description>
<ID>2</ID>
<StatusTypeID>-11</StatusTypeID>
<DisplayOnWeb>false</DisplayOnWeb>
</Data>
</Statuses>
```

## GetUDFDefinitions

### Description

Returns a list of User Defined Field (UDF) definitions.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String

### Response Elements

Name	Description	Type
UDFDefID	ID of UDF Definition	Integer
Description	Description	String
FieldType	Field Type, i.e.: "Text", "Date", "Number", or "List"	String
FieldAppliesTo	Field Applies To, i.e. "Reservation", "Booking", "Service Order", etc.	String

## Sample Code

```
Private Sub GetUDFDefinitions()  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
        (svc.GetUDFDefinitions("UserID", "Password"))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<UDFDefinitions>  
  
<Data>  
    <UDFDefID>1</UDFDefID>  
    <Description>Text UDF</Description>  
    <FieldType>Text</FieldType>  
    <FieldAppliesTo>Reservation</FieldAppliesTo>  
  
</Data>  
  
<Data>  
    <UDFDefID>2</UDFDefID>  
    <Description>Number UDF</Description>
```



```
<FieldType>Number</FieldType>
    <FieldAppliesTo>Booking</FieldAppliesTo>

</Data>

</UDFDefinitions>
```

## GetUDFListItems

### Description

Returns a list of User Defined Field (UDF) definition list items.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String

### Response Elements

Name	Description	Type
UDFDefID	ID of UDF Definition	Integer
UDFDefDescription	Description of UDF Definition	String

Name	Description	Type
ListUDFID	ID of List Item	Integer
ListUDFDefinition	Description of List UDF Item	String

## Sample Code

```
Private Sub GetUDFListItems()  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
        (svc.GetUDFListItems("UserID", "Password"))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<UDFListItems>  
  
  <Data>  
  
    <UDFDefID>3</UDFDefID>  
  
    <UDfDefDescription>List UDF</UDFDefDescription>  
  
  <ListUDFID>5</ListUDFID>  
    <ListUDFDescription>Option 1</ListUDFDescription>
```

```
</Data>
<Data>
    <UDFDefID>3</UDFDefID>
    <UDfDefDescription>List UDF</UDFDefDescription>
<ListUDFID>6</ListUDFID>
    <ListUDFDescription>Option 2</ListUDFDescription>
</Data>
</UDFListItems>
```

## GetWebProcessTemplateCategories

### Description

Returns a list of categories for a specific web process template.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
WebProcessTemplateID	Web Process Template ID	Integer

## Response Elements

Name	Description	Type
CategoryID	Category ID	Integer
CategoryDescription	Category Description	String
CutOffTime	Cutoff Time	DateTime
CutOffDays	Cutoff Days	Integer
CutOffHours	Cutoff Hours	Integer

## Sample Code

```
Private Sub GetWebProcessTemplateCategories()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader  
    (svc. GetWebProcessTemplateCategories  
    ("UserID", "Password", 10))  
    Dim dst As New DataSet("Data")  
    dst.ReadXml(objReader)  
End Sub
```

## Example Response

```
<Categories>
<Data>
<CategoryID>2</CategoryID>
<CategoryDescription>Catering</CategoryDescription>
<MinCutOffTime>1900-01-01T00:00:00</MinCutOffTime>
<MinCutOffDays>1</MinCutOffDays>
<MinCutOffHours>0</MinCutOffHours>
</Data>
<Data>
<CategoryID>3</CategoryID>
<CategoryDescription>Audio Visual</CategoryDescription>
<MinCutOffTime>1900-01-01T00:00:00</MinCutOffTime>
<MinCutOffDays>1</MinCutOffDays>
<MinCutOffHours>0</MinCutOffHours>
</Data>
</Categories>
```

## GetWebSecurityTemplateRoles

### Description

Returns a list of roles for a web security template.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
WebSecurityTemplateID	Web Security Template ID	Integer

### Response Elements

Name	Description	Type
WebRoleID	Web Role ID	Integer
WebRoleCode	Web Role Code	String
WebRoleDescription	Web Role Description	String

## Sample Code

```
Private Sub GetWebSecurityTemplateRoles()  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
        (svc.GetWebSecurityTemplateRoles ("UserID",  
        "Password", 4))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Roles>  
  
<Data>  
  
<WebRoleID>1</WebRoleID>  
  
<WebRoleCode>eventbrowser</WebRoleCode>  
  
<WebRoleDescxription>Browse Events</WebRoleDescription>  
    </Data>  
  
<Data>  
  
<WebRoleID>12</WebRoleID>  
  
<WebRoleCode>locategroup</WebRoleCode>
```

```
<WebRoleDescxription>Locate Group</WebRoleDescription>  
</Data>  
</Roles>
```

## GetWebProcessTemplateSettings

### Description

Returns settings for a web process template.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
WebProcessTemplateID	Web Process Template ID	Integer

### Response Elements

NAME	definition	Type
WebProcessTemplateDescription	Web Process Template Description	String



NAME	definition	Type
WebProcessTemplateMenuText	Web Process Template Menu Text	String
RequestStatusID	Request Status ID	Integer
RequestStatusDescription	Request Status Description	String
ReserveStatusID	Reserve Status ID	Integer
ReserveStatusDescription	Reserve Status Description	String
ConflictStatusID	Conflict Status ID	Integer
ConflictStatusDescription	Conflict Status Description	String
CancelStatusID	Cancel Status ID	Integer
CancelStatusDescription	Cancel Status Description	String
MaxBookings	Max No. Bookings Allowed per Reservation	Integer
MaxMinutes	Max No. Minutes Allowed	DateTime
CancelCutOffTime	Cancellation Cutoff Time	DateTime
CancelCutOffDays	Cancellation Number of Days	Integer

NAME	definition	Type
CancelCutOffHours	Cancellation Cutoff Hours	Integer
AllowCancelBookingInProgress	Cancel Booking In Progress	Boolean
CancelBookingInProgress StatusID	Cancel Booking In Progress Status ID	Integer
CancelBookingInProgress StatusDescription	Cancel Booking In Progress Status Description	String
AllowEndNow	End Booking In Progress	Boolean
MaxDays	Only Allow New Bookings Within Range of This Many Days	Integer
MaxDate	Only Allow New Bookings Prior To This Date	DateTime
MinDate	Only Allow New Bookings On/After This Date	DateTime
MinCutOffTime	New Booking Cutoff Time	DateTime
MinCutOffDays	New Booking Number of Days	Integer
MinCutOffHours	New Booking Cutoff Hours	Integer

## Sample Code

```
Private Sub GetWebProcessTemplateSettings()  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
    (svc.GetWebProcessTemplateSettings ("UserID",  
    "Password", 10))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Settings>  
  
<Data>  
  
<WebProcessTemplateDescription>Executive Template  
</WebProcessTemplateDescription>  
  
<WebProcessTemplateMenuText>Executive Conference Room Template  
</WebProcessTemplateMenuText>  
  
<RequestStatusID>11</RequestStatusID>  
  
<RequestStatusDescription>Web Request</RequestStatusDescription>  
  
<ReserveStatusID>12</ReserveStatusID>
```

```
<ReserveStatusDescription>Web Reservation
</ReserveStatusDescription>

<ConflictStatusID>2</ConflictStatusID>

<ConflictStatusDescription>Info Only</ConflictStatusDescription>

<CancelStatusID>3</CancelStatusID>

<CancelStatusDescription>Cancelled</CancelStatusDescription>

<MaxBookings>100</MaxBookings>

<MaxMinutes>0</MaxMinutes>

<CancelCutOffTime>1900-01-01T00:00:00</CancelCutOffTime>

<CancelCutOffDays>1</CancelCutOffDays>

<CancelCutOffHours>0</CancelCutOffHours>

<AllowCancelBookingInProgress>true
</AllowCancelBookingInProgress>

<CancelBookingInProgressStatusID>3
</CancelBookingInProgressStatusID>

<CancelBookingInProgressStatusDescription>Cancelled
</CancelBookingInProgressStatusDescription>

<AllowEndNow>true</AllowEndNow>

<MaxDays>350</MaxDays>

<MaxDate>1900-01-01T00:00:00</MaxDate>

<MinDate>1900-01-01T00:00:00</MinDate>
```

```
<MinCutOffTime>1900-01-01T00:00:00</MinCutOffTime>
<MinCutOffDays>1</MinCutOffDays>
<MinCutOffHours>0</MinCutOffHours>
</Data>
</Settings>
```

## GetWebTemplates

### Description

Returns a list of web templates.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String

## Response Elements

Name	Description	Type
Description	Web Template Description	String
ID	Web Template ID	Integer
MaxBookingsPerDay	Web Template Max. No. of Bookings Per Day	Integer
MaxBookingsPerDateRange	Web Template Max. No. of Bookings Per Date Range	Integer
NewBookingDays	Web Template 'Only Allow New Bookings Within Range of This Many Days'	Integer

## Sample Code

```
Private Sub GetWebTemplates()

    Dim svc As New EMSAPI.ServiceSoapClient

    Dim objReader As New System.IO.StringReader
    (svc.GetWebTemplates("UserID", "Password"))

    Dim dst As New DataSet("Data")

    dst.ReadXml(objReader)

End Sub
```

## Example Response

```
<WebTemplates>
<Data>
<Description>Executive Template</Description>
<ID>1</ID>
<MaxBookingsPerDay>5</MaxBookingsPerDay>
<MaxBookingsPerDateRange>30</MaxBookingsPerDateRange>
<NewBookingDays>1</NewBookingDays>
</Data>
<Data>
<Description>Standard Template</Description>
<ID>2</ID>
<MaxBookingsPerDay>1</MaxBookingsPerDay>
<MaxBookingsPerDateRange>10</MaxBookingsPerDateRange>
<NewBookingDays>2</NewBookingDays>
</Data>
</WebTemplates>
```

## GetWebUserBookings

### Description

Returns a list of bookings for a web user based on filters provided.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
StartDate	Start Date	DateTime
EndDate	End Date	DateTime
WebUserID	Web User ID	Integer
Statuses	List of Status IDs	Array Of Integers
StatusTypes	List of Status Types	Array Of Integers
ViewComboRoomComponents	Option to see bookings in components of combo rooms if bookings are in combo rooms	Boolean



## Response Elements

Name	Description	Type
ReservationID	Reservation ID	Integer
BookingID	Booking ID	Integer
BookingDate	Date that booking is reserved to start on	DateTime
StartBookingDate	Date that booking event starts on	DateTime
TimeEventStart	Booking Event Start Time	DateTime
TimeEventEnd	Booking Event End Time	DateTime
GMTEventStart	Booking GMT Event Start Time	DateTime
GMTEventEnd	Booking GMT Event End Time	DateTime
TimeBookingStart	Booking Reserved Start Time	DateTime
TimeBookingEnd	Booking Reserved End Time	DateTime
GMTBookingStart	Booking GMT Reserved Start Time	DateTime
GMTBookingEnd	Booking GMT Reserved End Time	DateTime
EventName	Event Name	String

Name	Description	Type
BuildingID	Building ID	Integer
BuildingCode	Building Code	String
Building	Building Description	String
TimeZoneID	Time Zone ID	Integer
TimeZone	Time Zone abbreviation	String
RoomID	Room ID	Integer
RoomCode	Room Code	String
RoomDescription	Location Description	String
RoomTypeID	Room Type ID	Integer
RoomType	Room Type	String
StatusID	Status ID	Integer
StatusTypeID	Status Type: -14 = Booked Space, -11 = Info Only, -13 = Wait, -12 = Cancel	Integer
StatusDescription	Status Description	String

Name	Description	Type
EventTypeID	Event Type ID	Integer
EventTypeDescription	Event Type Description	String
SetupTypeID	Setup Type ID	Integer
SetupTypeDescription	Setup Type Description	String
SetupCount	Setup Count	Integer
GroupID	Group/Customer ID	Integer
GroupName	Group/Customer name	String
GroupTypeID	Group Type ID	Integer
GroupTypeDescription	Group Type Description	String
Contact1ID	First Contact ID	Integer
Contact1Name	First Contact Name	String
Contact2ID	Second Contact ID	Integer
Contact2Name	Second Contact Name	String
WebProcessTemplateID	Web Process Template ID (0 is none)	Integer

Name	Description	Type
ContactEmailAddress	Contact Email Address	String
BillingReference	Billing Reference	String
CheckedIn	0 or 1 to signify Checked in or not	Boolean

## Sample Code

```
Private Sub GetWebUserBookings()  
    Dim dvwStatuses As DataView  
    Dim gintStatuses As New Generic.List(Of Int32)  
    Dim gintStatusTypes As New Generic.List(Of Int32)  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New StringReader(svc.GetStatuses  
        ("UserID", "Password"))  
  
    dvwStatuses = Me.GetData(objReader)  
  
    For Each drv As DataRowView In dvwStatuses  
        gintStatuses.Add(drv("ID"))  
    End For  
End Sub
```

Next

```
gintStatusTypes.Add(-14) `Booked Space

Dim strStatuses As New EMSAPI.ArrayOfInt
Dim strStatusTypes as New EMSAPI.ArrayOfInt

strStatuses.AddRange(gintStatuses.ToArray)
strStatusTypes.AddRange(gintStatusTypes.ToArray)

    objReader = New StringReader
    (svc.GetWebUserBookings("UserID", "Password",
    Date.Today, Date.Today, 12, strStatuses,
    strStatusTypes, False))

    Dim dst As New DataSet("Data")

    dst.ReadXml(objReader)

End Sub
```

## Example Response

<Bookings>

```
<Data>
<ReservationID>6650</ReservationID>
<BookingID>222008</BookingID>
<BookingDate>2009-10-04T00:00:00</BookingDate>
<StartBookingDate>2009-10-04T00:00:00</StartBookingDate>
<TimeEventStart>2009-10-04T16:00:00</TimeEventStart>
<TimeEventEnd>2009-10-04T17:00:00</TimeEventEnd>
<GMTEventStart>2009-10-04T22:00:00</GMTEventStart>
<GMTEventEnd>2009-10-04T23:00:00</GMTEventEnd>
<TimeBookingStart>2009-10-04T16:00:00</TimeBookingStart>
<TimeBookingEnd>2009-10-04T17:00:00</TimeBookingEnd>
<GMTBookingStart>2009-10-04T22:00:00</GMTBookingStart>
<GMTBookingEnd>2009-10-04T23:00:00</GMTBookingEnd>
<EventName>Spring Conference</EventName>
<BuildingID>1</BuildingID>
<BuildingCode>DEN</BuildingCode>
<Building>Denver</Building>
<TimeZoneID>68</TimeZoneID>
<TimeZone>MT</TimeZone>
```

```
<RoomID>3271</RoomID>
<RoomCode>RM101</RoomCode>
<RoomDescription>Room 101</RoomDescription>
<RoomTypeID>1</RoomTypeID>
<RoomType>Classroom</RoomType>
<StatusID>1</StatusID>
<StatusTypeID>-14</StatusTypeID>
<StatusDescription>Confirmed</StatusDescription>
<EventTypeID>4</EventTypeID>
<EventTypeDescription>Conference</EventTypeDescription>
<SetupTypeID>1</SetupTypeID>
<SetupTypeDescription>U - Shape</SetupTypeDescription>
<SetupCount>50</SetupCount>
<GroupID>499</GroupID>
<GroupName>ABC Company </GroupName>
<GroupTypeID>3</GroupTypeID>
<GroupTypeDescription>Corporate</GroupTypeDescription>
<Contact1ID>53</Contact1ID>
<Contact1Name>Jim Smith</Contact1Name>
```

```
<Contact2ID>-1<Contact2ID>  
<Contact2Name/>  
<WebProcessTemplateID>2</WebProcessTemplateID>  
    <ContactEmailAddress>jsmith@test.com</ContactEmailAddress>  
<CheckedIn>>false</CheckedIn>  
</Data>  
</Bookings>
```

## GetWebUserDetails

### Description

Returns details for a specific Web User.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
WebUserID	Web User ID	Integer



## Response Elements

Name	Description	Type
UserName	Web User Name	String
EmailAddress	Email Address	String
Phone	Phone	String
Fax	Fax	String
ExternalReference	External Reference	String
NetworkID	Network ID	String
TimeZoneID	Time Zone ID	Integer
SecurityStatus	Status ID	Integer
TemplateID	Web Security Template ID	Integer

## Sample Code

```
Private Sub GetWebUserDetails()  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
    (svc.GetWebUserDetails("UserID", "Password", 2312))
```

```
        Dim dst As New DataSet("Data")  
        dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<WebUserDetails>  
  <Data>  
    <UserName>Text Web User</UserName>  
    <EmailAddress>testcontact@test.com</EmailAddress>  
    <Phone>x123</Phone>  
    <Fax />  
    <ExternalReference />  
    <NetworkID />  
    <TimeZoneID>68</TimeZoneID>  
    <SecurityStatus>0</SecurityStatus>  
    <TemplateID>1</TemplateID>  
  </Data>  
</WebUserDetails>
```

## GetWebUserOptions

### Description

Returns a list of options for a specific web user.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
WebUserID	Web User ID	Integer

### Response Elements

Name	Description	Type
WebProcessTemplateID	Web Process Template ID	Integer
WebProcessTemplateDescription	Web Process Template Description	String
OptionName	OptionName	String
OptionValue	Option Value	String

## Sample Code

```
Private Sub GetWebUserOptions()  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
        (svc.GetWebUserOptions ("UserID", "Password", 2))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Options>  
  
<Data>  
  
<WebProcessTemplateID>1</WebProcessTemplateID>  
  
<WebProcessTemplateDescription>Hoteling Space</WebProcessTemplateDescription>  
  
<OptionName>AreaID</OptionName>  
  
<OptionValue>-1</OptionValue>  
  
</Data>  
  
<Data>  
  
<WebProcessTemplateID>10</WebProcessTemplateID>
```

```
<WebProcessTemplateDescription>Executive Template</WebProcessTemplateDescription>
<OptionName>BuildingID</OptionName>
<OptionValue>-1</OptionValue>
</Data>
<Data>
<WebProcessTemplateID>10</WebProcessTemplateID>
<WebProcessTemplateDescription> Executive Template </WebProcessTemplateDescription>
<OptionName>EndTime</OptionName>
<OptionValue>Jan  1 1900 12:00 AM</OptionValue>
</Data>
<Data>
<WebProcessTemplateID>10</WebProcessTemplateID>
<WebProcessTemplateDescription> Executive Template </WebProcessTemplateDescription>
<OptionName>EventTypeID</OptionName>
<OptionValue>0</OptionValue>
</Data>
<Data>
<WebProcessTemplateID>10</WebProcessTemplateID>
<WebProcessTemplateDescription> Executive Template </WebProcessTemplateDescription>
```

```
<OptionName>HomePage</OptionName>
<OptionValue>default.aspx</OptionValue>
</Data>
<Data>
<WebProcessTemplateID>10</WebProcessTemplateID>
<WebProcessTemplateDescription> Executive Template </WebProcessTemplateDescription>
<OptionName>StartTime</OptionName>
<OptionValue>Jan  1 1900 12:00 AM</OptionValue>
</Data>
<Data>
<WebProcessTemplateID>10</WebProcessTemplateID>
<WebProcessTemplateDescription> Executive Template </WebProcessTemplateDescription>
<OptionName>TimeZoneID</OptionName>
<OptionValue>-1</OptionValue>
</Data>
</Options>
```

## GetWebUsers

### Description

Returns a list of web users.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
WebUserName	Web User Name Filter	String
EmailAddress	Email Address Filter	String
ExternalReference	External Reference	String
NetworkID	Network ID	String

### Response Elements

Name	Description	Type
UserName	UserName	String

Name	Description	Type
EmailAddress	Email Address	String
ExternalReference	External Reference	String
NetworkID	Network ID	String
ID	Web User ID	Integer

## Sample Code

```
Private Sub GetWebUsers()  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
    (svc.GetWebUsers("UserID", "Password", "John",  
        "john@xyz.com", "john123", "john123"))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<WebUsers>  
  
<Data>
```



```
<UserName>John Smith</UserName>  
<EmailAddress>john@xyz.com</EmailAddress>  
<ExternalReference>john12345</ExternalReference>  
<NetworkID>john12345</NetworkID>  
<ID>58</ID>  
</Data>  
</WebUsers>
```

## GetWebUserWebProcessTemplates

### Description

Returns a list of Web Process Templates for a specific Web User.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
WebUserID	Web User ID	Integer

## Response Elements

Name	Description	Type
Description	Web Template Description	String
ID	Web Template ID	Integer
MenuText	Web Process Template Menu	String

## Sample Code

```
Private Sub GetWebUserWebProcessTemplates()  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
        (svc.GetWebUserWebProcessTemplates("UserID",  
        "Password", 2312))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<WebTemplates>  
  
<Data>
```

```
<Description>Template 1</Description>
<ID>2</ID>
<MenuText>Template 1</MenuText>
    </Data>

<Data>
<Description>Template 2</Description>
<ID>3</ID>
<MenuText>Template 2</MenuText>
</Data>
</WebTemplates>
```

## CHAPTER 15: EMS API Functions—Update Operations

- [UpdateBooking](#)
- [UpdateBooking2](#)
- [UpdateBookingCheckIn](#)
- [UpdateContact](#)
- [UpdateGroup](#)
- [UpdateReservation](#)
- [UpdateServiceOrder](#)
- [UpdateServiceOrderDetail](#)
- [UpdateUDF](#)
- [UpdateWebUser](#)
- [UpdateWebUserOptions](#)

### UpdateBooking

(Requires EMS API Advanced License)

#### Description

Updates a single Booking in EMS.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
BookingID	Booking ID	Integer
BookingDate	Booking Date	DateTime
StartTime	Start Time	DateTime
EndTime	EndTime	DateTime
StatusID	Status ID	Integer
RoomID	Room ID	Integer

## Response Elements

Name	Description	Type
Message	"Success!" or error, i.e. "Room is not available."	String

## Sample Code

```
Private Sub UpdateBooking()
```

```
Dim svc As New EMSAPI.ServiceSoapClient

Dim objReader As New System.IO.StringReader
(svc.UpdateBooking("UserID", "Password", 1234,
Date.Today, CDate("1/1/1900 8:00 AM"),
CDate("1/1/1900 9:00 AM"),1, 3199))

Dim dst As New DataSet("Data")

dst.ReadXml(objReader)
```

```
End Sub
```

## Example Response

```
<Messages>
<Message>
    <Message>Success!</Message>
</Message>
</Messages>
```

## UpdateBooking2

(Requires EMS API Advanced License)

### Description

Updates a single Booking in EMS.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
BookingID	Booking ID	Integer
BookingDate	Booking Date	DateTime
StartTime	Start Time	DateTime
EndTime	EndTime	DateTime
StatusID	Status ID	Integer
RoomID	Room ID	Integer
EventName	Event Name	String

## Response Elements

Name	Description	Type
Message	"Success!" or error, i.e. "Room is not available."	String

## Sample Code

```
Private Sub UpdateBooking()  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
    (svc.UpdateBooking2("UserID", "Password", 1234,  
        Date.Today, CDate("1/1/1900 8:00 AM"),  
        CDate("1/1/1900 9:00 AM"), 1, 3199, "Test Meeting"))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Messages>  
  
  <Message>  
  
    <Message>Success!</Message>  
  
  </Message>  
  
</Messages>
```

## UpdateBookingCheckIn

(Requires EMS API Advanced License)



## Description

Updates check in for a single booking.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
BookingID	Booking ID	Integer

## Response Elements

Name	Description	Type
Message	“Success!” or error, i.e. “Booking does not exist.”	String

## Sample Code

```
Private Sub UpdateBookingCheckIn()  
    Dim svc As New EMSAPI.ServiceSoapClient
```

```
Dim objReader As New System.IO.StringReader  
    (svc.UpdateBookingCheckIn("UserID", "Password", 12345)  
  
Dim dst As New DataSet("Data")  
  
dst.ReadXml(objReader)
```

```
End Sub
```

## Example Response

```
<Messages>  
<Message>  
    <Message>Success!</Message>  
</Message>  
</Messages>
```

## UpdateContact

(Requires EMS API Advanced License)

### Description

Updates a single Contact in EMS.

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
ContactID	Contact ID	Integer
ContactName	Contact Name	String
Title	Title	String
Address1	Address Line 1	String
Address2	Address Line 2	String
City	City	String
State	State	String
ZipCode	Zip Code	String
Country	Country	String
Phone	Phone	String
Fax	Fax	String

Name	Description	Type
EmailAddress	Email Address	String
ExternalReference	External Reference	String
Active	Active	Boolean

## Response Elements

Name	Description	Type
Message	"Success!" or error, i.e. "Contact Name is required."	String

## Sample Code

```
Private Sub UpdateContact()  
  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
    (svc.UpdateContact("UserID", "Password", 12345,  
        "Test Contact", "", "123 Main St.", "", "Denver",  
        "CO", "80111", "", "x123", "", "testcontact@test.com",  
        "", True)  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)
```

End Sub

## Example Response

```
<Messages>
  <Message>
    <Message>Success!</Message>
  </Message>
</Messages>
```

## UpdateGroup

(Requires EMS API Advanced License)

### Description

Updates a single Group in EMS.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String

Name	Description	Type
GroupID	Group ID	Integer
GroupName	Group Name	String
GroupTypeID	Group Type ID	Integer
Address1	Address Line 1	String
Address2	Address Line 2	String
City	City	String
State	State	String
ZipCode	Zip Code	String
Country	Country	String
Phone	Phone	String
Fax	Fax	String
EmailAddress	Email Address	String
ExternalReference	External Reference	String
Active	Active	Boolean

## Response Elements

Name	Description	Type
Message	"Success!" or error, i.e. "Group Name is required."	String

## Sample Code

```
Private Sub UpdateGroup()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader(svc.UpdateGroup("UserID", "Pass-  
word", 1234, "Test Group", 0, "123 Main St.", "", "Denver", "CO", "80111", "", "x123", "",  
"testgroup@test.com", "", True)  
    Dim dst As New DataSet("Data")  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Messages>  
<Message>  
    <Message>Success!</Message>  
</Message>
```

&lt;/Messages&gt;

## UpdateReservation

(Requires EMS API Advanced License)

### Description

Updates a single Reservation in EMS.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
ReservationID	Reservation ID (use -1 to lookup by Booking ID)	Integer
BookingID	Booking ID (ignored unless Reservation ID = -1)	Integer
WebUserID	Web User ID (0 = none. Use -1 to use existing Reservation's Web User ID)	Integer
WebTemplateID	Web Template ID (0 = none. Use -1 to use existing Reservation's Web Template ID, otherwise Web Template ID must be accessible by the Web User)	Integer



Name	Description	Type
ReservationSourceID	Reservation Source ID (Use -1 to use existing Reservation Source ID)	I
BillingReference	Billing Reference	String

## Response Elements

Name	Description	Type
Message	"Success!" or error, i.e. "Reservation ID does not exist."	String

## Sample Code

```
Private Sub UpdateReservation()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader  
    (svc.UpdateReservation("UserID", "Password",  
        1234, 0, 1, 2, 1, "abc"))  
    Dim dst As New DataSet("Data")  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Messages>  
  <Message>  
    <Message>Success!</Message>  
  </Message>  
</Messages>
```

## UpdateServiceOrder

(Requires EMS API Advanced License)

### Description

This API allows new service orders to be added to bookings.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
ServiceOrderID	EMS Service Order ID for which to edit	Integer

Name	Description	Type
StatelD	EMS State	Integer
ServeTypeID	EMS Service Type	Integer
TimeStart	Service Order Start Time	Datetime
TimeEnd	Service Order End Time	Datetime
EstimatedCount	Estimated Count	Integer
GuaranteedCount	Guaranteed Count	Integer
ActualCount	Actual Count	Integer

## Response Elements

Name	Description	Type
Message	“Success!” or error, i.e. “Service Order ID does not exist.”	String

## Sample Code

```
Private Sub UpdateServiceOrder()  
    Dim svc As New EMSAPI.ServiceSoapClient
```

```
Dim objReader As New System.IO.StringReader  
  (svc.AddUDFt("UserID", "Password", 1, 2, 1, 2,  
    '1/1/2012 11:00:00.000 AM', '2/1/2012 12:00:00.000 PM',  
    1, 2, 1))  
  
Dim dst As New DataSet("Data")  
  
dst.ReadXml(objReader)
```

```
End Sub
```

## Example Response

```
<Messages>  
<Message>  
  <Message>Success!</Message>  
</Message>  
</Messages>
```

## UpdateServiceOrderDetail

(Requires EMS API Advanced License)

### Description

This API allows for edits to service order details (resources).

## Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
ServiceOrderDetailID	Service Order Details ID for which to edit	Integer
ResourceID	Resource ID to be added	Integer
Quantity	Quantity of item being ordered	Decimal
PricingMethodID	1: 'Unit' 2: 'Hourly (Reserved Time)' 3: 'Hourly (Event Time)' 4: 'Hourly (Service Time)' 5: 'Hourly (Specific)' 6: 'Half Day/Full Day (Reserved Time)' 7: 'Half Day/Full Day (Event Time)' 8: 'Half Day/Full Day (Service Time)'	Integer
UnitPrice	Price per unit	Decimal
Notes	Notes	String

Name	Description	Type
SpecialInstructions	Special Instructions	String

## Response Elements

Name	Description	Type
Message	"Success!" or error, i.e. "Service Order Detail ID does not exist."	String

## Sample Code

```
Private Sub UpdateServiceOrderDetail()  
    Dim svc As New EMSAPI.ServiceSoapClient  
  
    Dim objReader As New System.IO.StringReader  
    (svc.UpdateServiceOrderDetail("UserID", "Password",  
    1, 2, 1, 2, 1, 1.00, 'notest', "special instructions"))  
  
    Dim dst As New DataSet("Data")  
  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Messages>
```

```
<Message>  
    <Message>Success!</Message>  
</Message>  
</Messages>
```

## UpdateUDF

(Requires EMS API Advanced License)

### Description

Updates a single UDF in EMS (Reservation or Booking level UDF only)

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
UDFID	User Defined Field ID	Integer
UDFValue	UDF Value	String

## Response Elements

Name	Description	Type
Message	"Success!" or error, i.e. "UDF ID is invalid."	String

## Sample Code

```
Private Sub UpdateUDF()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader  
        (svc.UpdateUDF("UserID", "Password", 12345, "udf text 2"))  
    Dim dst As New DataSet("Data")  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Messages>  
<Message>  
    <Message>Success!</Message>  
</Message>  
</Messages>
```



## UpdateWebUser

(Requires EMS API Advanced License)

### Description

Updates a single Web User in EMS.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
WebUserID	Web User ID	Integer
WebUserName	Web User Name	String
EmailAddress	Email Address	String
Phone	Phone	String
Fax	Fax	String
ExternalReference	External Reference	String
NetworkID	Network ID	String

Name	Description	Type
TimeZoneID	Time Zone ID	Integer
StatusID	Status ID (0=Active, 1=Pending, 2=Inactive, 3=Activate On Login	Integer
WebSecurityTemplateID	Web Security Template ID	Integer
WebProcessTemplates	Web Process Template List	Array Of Integers
Groups	Group List	Array Of Integers
Validated	Validated	Boolean

## Response Elements

Name	Description	Type
Message	"Success!" or error, i.e. "Contact Name is required."	String

## Sample Code

```
Private Sub UpdateWebUser()
    Dim gintWebProcessTemplates As New Generic.List(Of Int32)
    Dim gintGroups As New Generic.List(Of Int32)
```

```
gintWebProcessTemplates.Add(1)
gintWebProcessTemplates.Add(2)
gintWebProcessTemplates.Add(3)

gintGroups.Add(1234)

Dim strWebTemplates As New EMSAPI.ArrayOfInt
Dim strGroups As New EMSAPI.ArrayOfInt

strWebTemplates.AddRange(gintWebProcessTemplates.ToArray)
strGroups.AddRange(gintGroups.ToArray)

Dim svc As New EMSAPI.ServiceSoapClient
Dim objReader As New System.IO.StringReader
    (svc.UpdateWebUser("UserID", "Password", 2312,
    "Test Web User", "testwebuser@test.com", "x123",
    "", "", "", 68, 0, 1, strWebTemplates, strGroups, 0)
Dim dst As New DataSet("Data")
dst.ReadXml(objReader)

End Sub
```

## Example Response

```
<Messages>
<Message>
<Message>Success!</Message>
</Message>
</Messages>
```

## UpdateWebUserOptions

(Requires EMS API Advanced License)

### Description

Updates web user options for a single web user.

### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
WebUserID	Web User ID	Integer

Name	Description	Type
WebProcessTemplateID	Web Process Template ID	Integer
OptionName	OptionName	String
OptionValue	Option Value	String

## Response Elements

Name	Description	Type
Message	"Success!" or error, i.e. "Web User does not exist."	String

## Sample Code

```
Private Sub UpdateWebUserOptions()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader  
    (svc.UpdateWebUserOptions ("UserID", "Password",  
        5, 10, "EventTypeID", "1")  
    Dim dst As New DataSet("Data")  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<Messages>
```

```
<Message>
```

```
    <Message>Success!</Message>
```

```
  </Message>
```

```
</Messages>
```

## CHAPTER 16: EMS API Functions—Validate Operation

### ValidateBilling

(Requires EMS API Advanced License)

#### Description

This API validates either Billing Reference/PO Number or both are valid in EMS.

#### Request Parameters

Name	Description	Type
UserName	EMS User Name	String
Password	EMS User Password	String
BillingReference	Billing Reference	String
PONumber	PO Number	String

## Response Elements

Name	Description	Type
BillingReferenceValid	Is Billing Reference number valid	Boolean
PONumberValid	Is the PO Number valid	Boolean

## Sample Code

```
Private Sub ValidateBilling()  
    Dim svc As New EMSAPI.ServiceSoapClient  
    Dim objReader As New System.IO.StringReader(svc.ValidateBilling ("UserID",  
"Password", "EventTypeID", "1"))  
    Dim dst As New DataSet("Data")  
    dst.ReadXml(objReader)  
  
End Sub
```

## Example Response

```
<ValdidateBilling>  
  
<Data>  
  
    <BillingReferenceValid>false</BillingReferenceValid>  
    <PONumberValid>true</PONumberValid>
```



```
</Data>  
</ValidateBilling>
```

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