



P2000AE

Security Management System

XML-RPC

Application Programming Interface

P2000AE

Security Management System

XML-RPC

Application Programming Interface

Version 4.1 and higher, December, 2008

24-10241-216 Revision –



Security Solutions
(805) 522-5555
www.johnsoncontrols.com

Copyright 2008
Johnson Controls, Inc.
All Rights Reserved

No part of this document may be reproduced without the prior permission of Johnson Controls, Inc.

Acknowledgment

Cardkey P2000, BadgeMaster, and Metasys are trademarks of Johnson Controls, Inc.

All other company and product names are trademarks or registered trademarks of their respective owners.

If this document is translated from the original English version by Johnson Controls, Inc., all reasonable endeavors will be used to ensure the accuracy of translation. Johnson Controls, Inc. shall not be liable for any translation errors contained herein or for incidental or consequential damages in connection with the furnishing or use of this translated material.

Due to continuous development of our products, the information in this document is subject to change without notice. Johnson Controls, Inc. shall not be liable for errors contained herein or for incidental or consequential damages in connection with furnishing or use of this material. Contents of this publication may be preliminary and/or may be changed at any time without any obligation to notify anyone of such revision or change, and shall not be regarded as a warranty.

TABLE OF CONTENTS

Overview	1
Details	2
XML_RPC Calling Convention	2
Authentication	2
Security	3
Scheduled Actions	3
Troubleshooting	3
API Reference	4
Return Values	4
Traditional Method List	7
Access Group Methods	7
Access Point Methods	11
Alarm Methods	16
Company Methods	19
Counter Methods	20
Department Methods	24
Division Methods	25
Door Methods	26
Entity Methods	43
Event Methods	49
Identifier Methods	52
Input Methods	53
Interlock Methods	57
MultiCommand Methods	59
Output Methods	62
P2000 Methods	69
Panel Methods	71
Partition Methods	76
Request Queue Methods	76
Team Methods	77
Terminal Methods	78
Timezone Methods	79
UDF Methods	86
XAction Methods	87
P2000 ECCC Method List	88
User Authentication	89
Meta Data Interface	89
Configuration Interface	96
History Transaction Interface	102
Status Transaction Interface	104

Alarm Processing Interface 105

Command Interface 106

Heartbeat Interface 107

Revision History 108

P2000AE XML-RPC INTERFACE

This document describes the Application Programming Interface (API) for the P2000AE XML-RPC Interface for P2000 version 4.1 and later. This API details the data and interface requirements for both P2000 applications and third party applications to call methods in the P2000 XML-RPC Interface.

NOTE

- *This document is intended to be used by programmers or other qualified professionals who possess a reasonable level of experience with application program writing.*
 - *“P2000AE” is also referred to as “P2000” throughout this manual.*
-

Some functions supported in P2000 version 3.x are no longer available. In addition, previously available functions may have changed their name, parameters, and/or return values.

Return values are lists of nodes (fields) that are returned. They are returned in alphabetical order for APIs listed in the “Traditional Method List” section starting on page 7.

OVERVIEW

The P2000 XML-RPC is a P2000 interface that allows applications to execute methods in the P2000 system to lock/unlock doors, set/reset output points, acknowledge alarms, trigger P2000 host events and more. XML-RPC is a method of remote procedure calling using HTTP as the transport and XML as the encoding.

XML-RPC is an open standard designed to be as simple as possible, while allowing complex data structures to be transmitted, processed, and returned. It can be used with Perl, Java, Python, C, C++, PHP, and many other programming languages. Many different implementations are freely available for UNIX, Windows, and Macintosh systems. For C++ applications, Johnson Controls recommends the XmlRpc++ implementation by Chris Morley. The full XML-RPC spec can be viewed at www.xmlrpc.com.

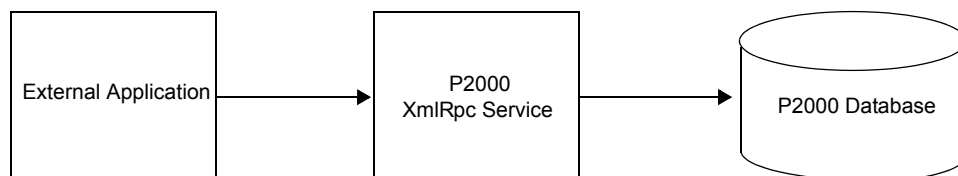


Figure 1: XML-RPC Interface Operation

DETAILS

XML_RPC Calling Convention

An XML-RPC message is an HTTP-POST request. The body of the request is in XML. A procedure executes on the server and the value it returns is also formatted in XML. An example XML-RPC message follows:

```
POST /RPC2 HTTP/1.1
User-Agent: XMLRPC++ 0.7
Host: p2000:41023
Content-Type: text/xml
Content-length: 220

<?xml version="1.0"?>
<methodCall><methodName>SetOutput</methodName>
  <params>
    <param>
      <value>Cardkey</value>
    </param>
    <param>
      <value>bWFzdGVy</value>
    </param>
    <param>
      <value>{E9F52C29-193F-4F0D-885D-87A6DC82992E}</value>
    </param>
    <param>
      <value><i4>0</i4></value>
    </param>
  </params>
</methodCall>
```

Authentication

The P2000 XML-RPC Interface requires the authentication of the XML RPC Client. The authentication procedure requires that the P2000Login method be called to obtain a session guid.

The P2000Login method requires a username and password as arguments and if successful, returns a session guid. This session guid must be passed as an argument to all other method calls. When the client is done with their session, the P2000Logout method should be called.

The username must be a valid P2000 operator username. The password parameter has several options related to how it is encrypted. This setting is the same for all applications using the P2000 XML-RPC Interface on a P2000 system. The password mode is set on the *XmlRpc* tab of the *Edit Site Parameters* application of the P2000 software.

Security

The P2000 XML-RPC Service will only accept messages from a list of valid IP addresses and valid computers. The list of valid IP addresses always includes the IP address of the P2000 server. The list of valid IP addresses and computer names is configured in the *External IP* section of the P2000 *System Configuration* application. These computer names are converted to valid IP addresses by calling the “gethostbyname” function of Windows. Note that this conversion from computer name to IP address is only performed when the XML-RPC service starts.

Scheduled Actions

When commands are scheduled (such as DoorUnlockScheduled), the P2000 uses the same mechanism for executing these commands as it does for P2000 Host Events with delayed actions. These actions are performed by the P2000 RTL Route Service and should typically be executed within 10 seconds of their scheduled time. Since the P2000 software was not designed for large numbers of scheduled actions, the use of scheduled commands should be kept to a minimum.

Troubleshooting

The P2000 XML-RPC service can be ran in “debug” mode to see additional information about commands that are being processed. First stop the XML-RPC service using Windows or P2000 Service Control. Then open a command prompt in the P2000 “bin” directory and start the XML-RPC service in debug mode with the following command:

```
P2KXmlRpc -d
```

The XML-RPC service will now operate as a console application and will output information to its console window. The XML-RPC service can be stopped when running in debug mode by entering a <Ctrl> C in its console window.

API REFERENCE

The P2000 XML-RPC methods documented below are described using C/C++ syntax. The arguments listed are actually sent as a list of param values as show in “XML_RPC Calling Convention” on page 2.

Return Values

Most P2000 XML-RPC methods return their execution results in the same fashion. Methods that return a BOOL value will return the following XML data when successful:

```
<?xml version="1.0"?>
<methodResponse>
  <params>
    <param>
      <value><i4>1</i4></value>
    </param>
  </params>
</methodResponse>
```

When methods fail, they will return a “fault” structure that contains an integer “faultCode” and a “faultString.” A typical fault will return XML data similar to the following:

```
<?xml version="1.0"?>
<methodResponse>
  <fault>
    <value>
      <struct>
        <member>
          <name>faultCode</name>
          <value><i4>-1</i4></value>
        </member>
        <member>
          <name>faultString</name>
          <value>type error</value>
        </member>
      </struct>
    </value>
  </fault>
</methodResponse>
```

The following tables provides a list of the return value and the associated error text.

Return Values and Error Texts	
Return Value	Error
-1	Unknown error
-2	Error opening database
-3	Error reading from or writing to database
-4	Invalid username or password
-5	Unexpected error during processing
-6	Invalid name
-7	Duplicate name
-8	Partition not found in database

Return Values and Error Texts	
Return Value	Error
-9	Access Group not found in database
-10	Terminal not found in database
-11	Terminal Group not found in database
-12	Timezone not found in database
-13	Timezone is in use
-14	Alarm not found in database
-15	Alarm is in incorrect state
-16	Event not found in database
-17	Scheduled action not found in database
-18	Badge not found in database
-19	Cardholder not found in database
-20	Invalid UDF type
-21	Counter not found in database
-22	Error downloading data to controller or command not supported.
-23	Terminal is not a reader
-24	Terminal is disabled
-25	Input not found in database
-26	Output not found in database
-27	Panel not found in database
-28	Output Group not found in database
-29	Invalid security level
-30	Invalid operation for controller type
-31	Terminal status not found in database
-32	Input status not found in database.
-33	Interlock not found in database.
-34	MCO not found in database.
-35	Output status not found in database.
-36	Invalid XML request file is invalid.
-37	XML request file not found.
-38	Request not found.
-39	Invalid user session.
-40	Alarm completion not allowed.
-41	Error updating alarm.
-43	Record not in partition.
-44	No parameter, XmlDoc.
-45	Item type not supported.
-46	Value not in range.

Methods that return data, such as DoorGetScheduled, return an array of structures where each structure contains a scheduled command. For example:

```
<?xml version="1.0"?>
<methodResponse>
  <params>
    <param>
      <value>
        <array>
          <data>
            <value>
```

```

    <struct>
      <member>
        <name>ScheduledAction</name>
        <value>DoorTimedUnlock</value>
      </member>
      <member>
        <name>ItemName</name>
        <value>Front Lobby Door</value>
      </member>
      <member>
        <name>ItemGuid</name>
        <value>{8AFBC4D6-9185-43BD-9434-3C655E0A8D17}</value>
      </member>
      <member>
        <name>ScheduledID</name>
        <value>915</value>
      </member>
      <member>
        <name>ScheduledTime</name>
        <value><dateTime.iso8601>01050911T09:43:00</dateTime.iso8601></value>
      </member>
      <member>
        <name>ScheduledParam</name>
        <value><i4>60</i4></value>
      </member>
    </struct>
  </value>
<value>
  <struct>
    <member>
      <name>ScheduledAction</name>
      <value>DoorTimedUnlock</value>
    </member>
    <member>
      <name>ItemName</name>
      <value>Engineering Lab Door</value>
    </member>
    <member>
      <name>ItemGuid</name>
      <value>{ABE254EB-38CA-4C06-8E2A-F6C6A21E64B3}</value>
    </member>
    <member>
      <name>ScheduledID</name>
      <value>951</value>
    </member>
    <member>
      <name>ScheduledTime</name>
      <value><dateTime.iso8601>01050911T10:13:00</dateTime.iso8601></value>
    </member>
    <member>
      <name>ScheduledParam</name>
      <value><i4>35</i4></value>
    </member>
  </struct>
</value>
</data>
</array>
</value>
</param>
</params>
</methodResponse>

```

Traditional Method List

The methods listed in this section are based on the P2000 V3.x methodology. The functions are named based on the P2000 item type they are associated with and the corresponding operation.

Access Group Methods

AccessGroupAdd(string sUserName, string sSessionGuid, string sAccessGroupName, string sAccessGroupGuid, string sPartitionGuid, int iPublic, string array sTerminalGuids, string array sTerminalGroupGuids)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sAccessGroupName	name for new Access Group
sAccessGroupGuid	GUID for new Access Group (autoassigned if "NULL")
sPartitionGuid	GUID for the partition which owns this access group (ignored on non-partitioned systems)
iPublic	0 = non-public, 1 = public (ignored on non-partitioned systems)
sTerminalGuids	array of Terminal GUIDs
sTerminalGroupGuids	array of Terminal Group GUIDs

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

AccessGroupAddByName(string sUserName, string sSessionGuid, string sAccessGroupName, string sAccessGroupGuid, string sPartitionName, int iPublic, string array sTerminals, string array sTerminalGroups)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sAccessGroupName	name for new Access Group
sAccessGroupGuid	GUID for new Access Group (autoassigned if "NULL")
sPartitionName	name of the partition which owns this access group (ignored on non-partitioned systems)
iPublic	0 = non-public, 1 = public (ignored on non-partitioned systems)
sTerminals	array of ACO or Legacy Terminal Names
sTerminalGroups	array of ACO or Legacy Terminal Group names

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

AccessGroupGetList(string sUserName, string sSessionGuid, string sPartitionGuid)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionGuid	Guid of Partition to get Access Group list (ignored on non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Access Group GUID
ItemName	Access Group Name
PartitionGuid	Guid of the partition which owns this access group
PartitionName	Name of the partition which owns this access group
Public	0 = non-public, 1 = public

Version

Available in P2000 V4.1 and later (initially P2000 V3.6 SP1).

AccessGroupGetListByName(string sUserName, string sSessionGuid, string sPartitionName)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionName	name of Partition to get AccessGroup list (ignored on non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Access Group GUID
ItemName	Access Group Name
PartitionGuid	Guid of the partition which owns this access group
PartitionName	Name of the partition which owns this access group
Public	0 = non-public, 1 = public

Version

Available in P2000 V4.1 and later (initially P2000 V3.6 SP1).

AccessGroupModify(string sUserName, string sSessionGuid, string sAccessGroupGuid, string array sTerminalGuids, string array sTerminalGroupGuids)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sAccessGroupGuid	GUID for new Access Group (autoassigned if "NULL")
sTerminalGuids	array of Terminal GUIDs
sTerminalGroupGuids	array of Terminal Group GUIDs

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

AccessGroupModifyByName(string sUserName, string sSessionGuid, string sAccessGroupName, string sPartitionName, string array sTerminalNames, string array sTerminalGroupNames)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sAccessGroupName	Name for new Access Group
sPartitionName	name of the partition which owns this access group (ignored on non-partitioned systems)
sTerminalNames	Array of ACO or Legacy Terminal Names
sTerminalGroupNames	Array of ACO or Legacy Terminal Group names

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

AccessGroupDelete(string sUserName, string sSessionGuid, string sAccessGroupGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sAccessGroupGuid	Access Group GUID

Note: The access group will be deleted from all badges that are assigned this access group.

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

AccessGroupDeleteByName(string sUserName, string sSessionGuid, string sAccessGroupName, string sPartitionName)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sAccessGroupName	name for new Access Group
sPartitionName	Name of the partition which owns this access group (ignored on non-partitioned systems)

Note: The access group will be deleted from all badges that are assigned this access group.

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

Access Point Methods

AccessPointEnable(string sUserName, string sSessionGuid, string sAccessPointGuid, int iEnable)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sAccessPointGuid	Guid of the access point
iEnable	1 = Enable, 0 = Disable

Notes:

1. If the access point is associated with a legacy controller (e.g. CK720 / CK721), this function disables the entire terminal.
2. If the access point is associated with the CK722, this function sets the access point's `READER_ENABLED` attribute to the value specified by `iEnable`.

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later.

AccessPointGetList(string sUserName, string sSessionGuid, string sPartitionGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionGuid	Guid of Partition to get Access Point list (ignored on non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Access Point GUID
ItemName	Access Point Name
PanelGuid	GUID of the panel which contains this access point
PanelName	Name of the panel which contains this access point
PartitionGuid	GUID of the partition which owns this access point
PartitionName	Name of the partition which owns this access point
Public	0 = non-public, 1 = public

Version

Available in P2000 V4.1 and later.

AccessPointGetListByName(string sUserName, string sSessionGuid, string sPartitionName)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionName	Name of partition to get Access Point list (ignored for non-partitioned system)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Access Point GUID
ItemName	Access Point Name
PanelGuid	GUID of the panel which contains this access point
PanelName	Name of the panel which contains this access point
PartitionGuid	GUID of the partition which owns this access point
PartitionName	Name of the partition which owns this access point
Public	0 = non-public, 1 = public

Version

Available in P2000 V4.1 and later.

AccessPointGetSecurityLevel(string sUserName, string sSessionGuid, string sAccessPointGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sAccessPointGuid	Guid of the access point

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Access Point GUID
ItemName	Access Point Name
SecurityLevel	Integer value representing the current security level for this item (-1 = unknown)
SecurityLevelText	Depending on the security level and the configured security level ranges one of the following values: "Green," "Blue," "Yellow," "Orange," "Red," "Unknown"

Version

Available in P2000 V4.1 and later.

AccessPointGetSecurityLevelByName (string sUserName, string sSessionGuid, string sAccessPointName, string sPartitionName)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sAccessPointName	Name of the access point
sPartitionName	Name of the partition the access point belongs to (ignored if system is non-partitioned)

Return Values

Please see function AccessPointGetSecurityLevel(...) on page 12.

Version

Available in P2000 V4.1 and later.

AccessPointGetStatus (string sUserName, string sSessionGuid, string sAccessPointGuid)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sAccessPointGuid	Guid of the access point

Return Values

Returns a structure with the following members for the specified door:

Member	Description
ItemGuid	Access Point GUID
ItemName	Access Point Name
ItemStatus	Integer value of status
ItemStatusText	Text value of status
ItemStatusTimeStamp	String representation of UTC Time Stamp of last reported status change (W3C format)

The following table lists the possible status values. Please note that depending on the associated controller not all values apply to all access points.

Status Value	Status Name
0	Up / Locked
1	Down
2	Unknown
5	Unlocked
7	Override

Version

Available in P2000 V4.1 and later.

AccessPointGetStatusByName (string sUserName, string sSessionGuid, string sAccessPointName, string sPartitionName)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sAccessPointName	Name of the access point
sPartitionName	Name of the partition the access point belongs to (ignored if system is non-partitioned)

Return Values

Please see function AccessPointGetStatus(...) on page 13.

Version

Available in P2000 V4.1 and later.

AccessPointSetSecurityLevel(string sUserName, string sSessionGuid, string sAccessPointGuid, int iSecurityLevel)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sAccessPointGuid	Guid of the access point
iSecurityLevel	The new security level for this access point (00.. 99)

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later.

AccessPointSetSecurityLevelByName (string sUserName, string sSessionGuid, string sAccessPointName, string sPartitionName, int iSecurityLevel)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sAccessPointName	Name of the access point
sPartitionName	Name of the partition the access point belongs to (ignored if system is non-partitioned)
iSecurityLevel	The new security level for this access point (00.. 99)

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later.

AccessPointSetSecurityLevelColor(string sUserName, string sSessionGuid, string sAccessPointGuid, int iSecurityColor)
Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sAccessPointGuid	Guid of Access Point
iSecurityLevelColor	0 = clear, 1 = green, 2 = blue, 3 = yellow, 4 = orange, 5 = red

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

AccessPointSetSecurityLevelColorByName (string sUserName, string sSessionGuid, string sAccessPointName, string sPartitionName, string sSecurityLevelColor)
Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sAccessPointName	Name of Access Point
sPartitionName	Name of partition (ignored on non-partitioned systems)
sSecurityLevelColor	"clear," "green," "blue," "yellow," "orange," "red"

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

Alarm Methods

AlarmGetList(string sUserName, string sSessionGuid, string sPartitionGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionGuid	Guid of Partition to get alarm list (ignored on non-partitioned systems)

Return Values

Returns a structure with the following members for each alarm:

Member	Description
AlarmAckRequired	1 = alarm requires acknowledge before completion
AlarmCategory	Category of alarm
AlarmCompletionItemState	State of item required to complete alarm
AlarmEscalationLevel	Escalation Level of alarm
AlarmInstruction	Instruction text for alarm
AlarmItemState	State of item generating alarm
AlarmItemStateTime	Time that item went to current state
AlarmPriority	Priority of alarm
AlarmResponseRequired	1 = alarm requires response before completion
AlarmState	1 = completed, 2 = responding, 3 = acknowledged, 4 = pending
AlarmStateTime	Time that alarm went to current state
AlarmType	Type of alarm (see below)
AlarmTypeGuid	Type Guid of alarm
AlarmTypeID	Type ID of alarm
ItemGuid	Guid of alarm
ItemName	Alarm Name
PartitionGuid	Guid of partition which owns this alarm
PartitionName	name of partition which owns this alarm
Public	0 = non-public, 1 = public

Alarm Types

State	Description
1	GENERIC
2	PANEL_INPUT_POINT
3	AREA
4	GUARDTOUR
5	MUSTER_RUNNING
6	MUSTER_ZONE_STATUS
7	MUSTER_WHEN_DISABLED
8	MUSTER_ABORTED
9	LOOP_TAMPER
10	EVENT
11	G3_EVENT
12	AV_MOTION
13	AV_BEHAVIOR

State	Description
14	AV_ VIDEOLOSS
15	AV_ DRYCONTACT
16	AV_ SYSTEM
17	INTRUSION_ZONE

Version

Available in P2000 V3.8 and later.

AlarmGetListByName(string sUserName, string sSessionGuid, string sPartitionName)

Parameters

Argument	Description
UserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionName	Name of the partition the alarm belongs to (ignored if system is non-partitioned)

Return Values

Please see function AlarmGetList(...) on page 16.

Version

Available in P2000 V3.8 and later.

AlarmGetState(string sUserName, string sSessionGuid, string sAlarmGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sAlarmGuid	Database GUID of the alarm for which the state is to be returned

Return Values

Returns a structure with the following members for the specified alarm:

State	Description
0	Not Found
1	Completed
2	Responding
3	Acknowledged
4	Pending

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

AlarmUpdate(string sUserName, string sSessionGuid, string sAlarmGuid, int iAlarmState, string sResponse)

This function has been obsoleted and is only provided for backwards compatibility. Newly developed code should use the method *AlarmAction* instead.

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sAlarmGuid	Database GUID of the alarm for which the state is to be returned
iAlarmState	New alarm state: 1 = alarm completed, 2 = alarm responding, 3 = alarm acknowledged
sResponse	Response to be recorded with alarm (only valid for iAlarmState = 2)

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

AlarmAction (string sUserName, string sSessionGuid, string sAlarmConditionSequenceGuid, int iNewAlarmState, string sResponse)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sAlarmConditionSequenceGuid	Guid associated with the alarm condition sequence
iNewAlarmState	New alarm state: 1 = alarm completed, 2 = alarm responding, 3 = alarm acknowledged
sResponse	Response to be recorded with alarm (only valid for iAlarmState =2)

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

Company Methods

CompanyGetList(string sUserName, string sSessionGuid, string sPartitionGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionGuid	Guid of Partition to get Company list (ignored on non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Company GUID
ItemName	Company Name
PartitionGuid	Guid of the partition which owns this Company
PartitionName	Name of the partition which owns this Company
Public	0 = non-public, 1 = public

Version

Available in P2000 V4.1 and later (initially P2000 V3.6 SP1).

CompanyGetListByName(string sUserName, string sSessionGuid, string sPartitionName)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionName	Name of partition to get Company list (ignored on non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Company GUID
ItemName	Company Name
PartitionGuid	Guid of the partition which owns this company
PartitionName	Name of the partition which owns this company
Public	0 = non-public, 1 = public

Version

Available in P2000 V4.1 and later (initially P2000 V3.6 SP1).

Counter Methods

CounterGetList(string sUserName, string sSessionGuid, string sPartitionGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionGuid	Guid of Partition to get Counter list (ignored on non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Counter GUID
ItemName	Counter Name
PartitionGuid	Guid of the partition which owns this counter
PartitionName	Name of the partition which owns this counter
Public	0 = non-public, 1 = public

Version

Available in P2000 V4.1 and later (initially P2000 V3.6 SP1).

CounterGetListByName(string sUserName, string sSessionGuid, string sPartitionName)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionName	Name of partition to get Counter list (ignored for non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Counter GUID
ItemName	Counter Name
PartitionGuid	Guid of the partition which owns this counter
PartitionName	Name of the partition which owns this counter
Public	0 = non-public, 1 = public

Version

Available in P2000 V4.1 and later (initially P2000 V3.6 SP1).

CounterGetValue(string sUserName, string sSessionGuid, string sCounterGuid)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sCounterGuid	Counter GUID

Return Values

If successful, returns a structure with the following members for the specified counter:

Member	Description
ItemValue	Signed 32-bit values of counter

Version

Available in P2000 V4.1 (initially P2000 V3.6 SP1).

CounterGetValueByName(string sUserName, string sSessionGuid, string sCounterName, string sPartitionName)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sCounterName	Counter Name
sPartitionName	Name of partition to get Counter list (ignored for non-partitioned system)

Return Values

If successful, returns a structure with the following members for the specified counter:

Member	Description
ItemValue	Signed 32-bit values of counter

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

CounterSetValue(string sUserName, string sSessionGuid, string sCounterGuid, int iValue)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sCounterGuid	Counter GUID
iValue	Counter Value

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.6 SP1).

CounterSetValueByName(string sUserName, string sSessionGuid, string sCounterName, string sPartitionName, int iValue)
Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sCounterName	Counter Name
sPartitionName	Name of partition to get Counter list (ignored for non-partitioned systems)
iValue	Counter Value

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.8 SP1).

CounterChangeValue(string sUserName, string sSessionGuid, string sCounterGuid, int iValueBy)
Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sCounterGuid	Counter GUID
iValueBy	Value to increment the counter by (if less than zero = decrement)

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later.

CounterChangeValueByName(string sUserName, string sSessionGuid, string sCounterName, string sPartitionName, int iValueBy)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sCounterName	Counter Name
sPartitionName	Name of partition to get Counter list (ignored for non-partitioned system)
iValueBy	Value to increment the counter by (if less than zero = decrement)

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later.

Department Methods

DepartmentGetList(string sUserName, string sSessionGuid, string sPartitionGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionGuid	Guid of Partition to get Department list (ignored on non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Department GUID
ItemName	Department Name
PartitionGuid	Guid of the partition which owns this department
PartitionName	Name of the partition which owns this department
Public	0 = non-public, 1 = public

Version

Available in P2000 V4.1 and later (initially P2000 V3.6 SP1).

DepartmentGetListByName(string sUserName, string sSessionGuid, string sPartitionName)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionName	Name of partition to get Department list (ignored for non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Department GUID
ItemName	Department Name
PartitionGuid	Guid of the partition which owns this department
PartitionName	Name of the partition which owns this department

Version

Available in P2000 V4.1 and later.

Division Methods

DivisionGetList(string sUserName, string sSessionGuid, string sPartitionGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionGuid	Guid of Partition to get Division list (ignored on non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Division GUID
ItemName	Division Name
PartitionGuid	Guid of the partition which owns this division
PartitionName	Name of the partition which owns this division
Public	0 = non-public, 1 = public

Version

Available in P2000 V4.1 and later.

DivisionGetListByName(string sUserName, string sSessionGuid, string sPartitionName)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionName	Name of partition to get Division list (ignored for non-partitioned system)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Division GUID
ItemName	Division Name
PartitionGuid	Guid of the partition which owns this division
PartitionName	Name of the partition which owns this division
Public	0 = non-public, 1 = public

Version

Available in P2000 V4.1 and later.

Door Methods

DoorDeleteScheduled(string sUserName, string sSessionGuid, int iScheduledID)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
iScheduledID	ID of scheduled action to be deleted

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

DoorGetAlarmInputs(string sUserName, string sSessionGuid, string sDoorGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorGuid	Guid of Door

Return Values

Returns an array of structures with the following members:

Member	Description
AlarmName	Name of Alarm (Duress, Forced Door, Propped Door, Pin Code Retry, or Soft In-X-It)
InputNumber	Index number of the input point
ItemGuid	Guid of the input point
ItemName	Name of the input point
PartitionGuid	Guid of the Partition which owns this input point
PartitionName	Name of the Partition which owns this input point
Public	0 = non-public, 1 = public

Notes:

1. If the alarm input is turned off in the P2000 configuration, all of the input parameters, except AlarmName and InputNumber will be empty for that input.
2. This function is not supported for CK722 controller.

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

DoorGetAlarmInputsByName(string sUserName, string sSessionGuid, string sDoorName, string sPartitionName)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorName	Name of Door
sPartitionName	Name of partition (ignored for non-partitioned system)

Return Values

Returns an array of structures with the following members:

Member	Description
AlarmName	Name of Alarm (Duress, Forced Door, Propped Door, Pin Code Retry, or Soft In-X-It)
InputNumber	Index number of the input point
ItemGuid	Guid of the input point
ItemName	Name of the input point
PartitionGuid	Guid of the Partition which owns this input point
PartitionName	Name of the Partition which owns this input point
Public	0 = non-public, 1 = public

Notes:

1. If the alarm input is turned off in the P2000 configuration, all of the input parameters, except AlarmName and InputNumber will be empty for that input.
2. This function is not supported for CK722 controller.

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

DoorGetList(string sUserName, string sSessionGuid, string sPartitionGuid)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionGuid	Guid of Partition to get door list (ignored on non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Door GUID
ItemName	Door Name
PanelGuid	Guid of panel which contains this door
PanelName	Name of the panel which contains this door
PartitionGuid	Guid of the partition which owns this door

Member	Description
PartitionName	Name of the partition which owns this door
Public	0 = non-public, 1 = public

Version

Available in P2000 V4.1 (initially P2000 V3.6).

DoorGetListByName(string sUserName, string sSessionGuid, string sPartitionName)
Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionName	Name of Partition to get door list (ignored on non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Door GUID
ItemName	Door Name
PanelGuid	Guid of panel which contains this door
PanelName	Name of the panel which contains this door
PartitionGuid	Guid of the partition which owns this door
PartitionName	Name of the partition which owns this door
Public	0 = non-public, 1 = public

Version

Available in P2000 V4.1 (initially P2000 V3.6).

DoorGetScheduled(string sUserName, string sSessionGuid, string sDoorGuid)
Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorGuid	Guid of Door

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Door GUID
ItemName	Door Name
ScheduledAction	Action to be performed
ScheduledID	ID of action scheduled

Member	Description
ScheduledParam	Override time value (only for door override action)
ScheduledTime	Time of action

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

**DoorGetScheduledByName(string sUserName, string sSessionGuid,
string sDoorName, string sPartitionName)**
Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorName	Name of Door
sPartitionName	Name of Partition (ignored for non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Door GUID
ItemName	Door Name
ScheduledAction	Action to be performed
ScheduledID	ID of action scheduled
ScheduledParam	Override time value (only for door override action)
ScheduledTime	Time of action

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

**DoorGetAllScheduled(string sUserName, string sSessionGuid, string
sPartitionGuid)**
Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionGuid	Guid of Partition to get door list (ignored on non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Door GUID
ItemName	Door Name
ScheduledAction	Action to be performed
ScheduledID	ID of action scheduled

Member	Description
ScheduledParam	Override time value (only for door override action)
ScheduledTime	Time of action

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

DoorGetAllScheduledByName(string sUserName, string sSessionGuid, string sPartitionName)
Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionName	Name of Partition to get door list (ignored on non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Door GUID
ItemName	Door Name
ScheduledAction	Action to be performed
ScheduledID	ID of action scheduled
ScheduledParam	Override time value (only for door override action)
ScheduledTime	Time of action

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

DoorGetSecurityLevel(string sUserName, string sSessionGuid, string sDoorGuid)
Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorGuid	Guid of Door

Return Values

The return value is the security level of the door.

Version

Available in P2000 V3.8 and later.

DoorPointGetSecurityLevelByName (string sUserName, string sSessionGuid, string sDoorName, string sPartitionName)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorName	Name of Door
sPartitionName	Partition Name (ignored on non-partitioned systems)

Return Values

The return value is the security level of the door.

Version

Available in P2000 V4.1 and later.

DoorGetStatus(string sUserName, string sSessionGuid, string sDoorGuid)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorGuid	Guid of Door

Return Values

Returns a structure with the following members for the specified door:

Member	Description
ItemGuid	Door GUID
ItemName	Door Name
ItemStatus	Integer value of status
ItemStatusText	Text value of status
ItemStatusTimeStamp	String representation of UTC Time Stamp of last reported status change (W3C format)

The following table lists the door status values. Please note that the applicable status values depend on the controller type.

Status Value	Status Name
0	Up / Locked
1	Down
2	Unknown
3	Unlocked
4	Disabled
7	Override
8	Unlocked & Open
9	Unlocked & Closed
10	Locked & Open
11	Locked & Closed

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

DoorGetStatusByName(string sUserName, string sSessionGuid, string sDoorName, string sPartitionName)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorName	Name of Door
sPartitionName	Name of partition to get Door list (ignored for non-partitioned systems)

Return Values

Refer to the function DoorGetStatus(...) on page 31 for detailed information about possible return values.

Version

Available in P2000 V4.1 or later (initially P2000 V3.8).

DoorLock(string sUserName, string sSessionGuid, string sDoorGuid)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorGuid	Guid of Door

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

DoorLockScheduled(string sUserName, string sSessionGuid, string sDoorGuid, datetime tScheduledTime)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorGuid	Guid of Door
tScheduledTime	Time for action to occur

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

DoorLockByName(string sUserName, string sSessionGuid, string sDoorName, string sPartitionName)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorName	Name of Door
sPartitionName	Name of partition (ignored on non-partitioned systems)

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

DoorLockByNameScheduled(string sUserName, string sSessionGuid, string sDoorName, string sPartitionName, datetime tScheduledTime)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorName	Name of Door
sPartitionName	Name of partition (ignored on non-partitioned systems)
tScheduledTime	Time for action to occur

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

DoorSetOverrideTimezone(string sUserName, string sSessionGuid, string sDoorGuid, string sTimezoneGuid)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorGuid	Guid of Door
sTimezoneGuid	Guid of Timezone

Note: This method is not supported for CK722 related doors.

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

DoorSetOverrideTimezoneByName(string sUserName, string sSessionGuid, string sDoorName, string sPartitionName, string sTimezoneName)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorName	Name of Door
sPartitionName	Name of partition (ignored on non-partitioned systems)
sTimezoneName	Name of time zone

Note: This method is not supported for CK722 related doors.

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

DoorSetOverrideTimezoneEnable(string sUserName, string sSessionGuid, string sDoorName, sPartitionName, int iEnable)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorName	Name of Door
sPartitionName	Name of partition (ignored on non-partitioned systems)
iEnable	1 = override timezone enabled, 0 = override timezone disabled

Note: This method is not supported for CK722 related doors.

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

DoorSetOverrideTimezoneEnableByName(string sUserName, string sSessionGuid, string sDoorName, string sPartitionName, int iEnable)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorName	Name of Door
sPartitionName	Name of partition (ignored on non-partitioned systems)
iEnable	1 = override timezone enabled, 0 = override timezone disabled

Note: This method is not supported for CK722 related doors.

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

DoorSetOverrideTimezoneScheduled(string sUserName, string sSessionGuid, string sDoorGuid, string sTimezoneGuid, datetime tScheduledTime)
Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorGuid	Guid of Door
sTimezoneGuid	Guid of Timezone
tScheduledTime	Time for action to occur

Note: This method is not supported for CK722 related doors.

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

DoorSetOverrideTimezoneByNameScheduled(string sUserName, string sSessionGuid, string sDoorName, string sPartitionName, string sTimezoneGuid, datetime tScheduledTime)
Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorName	Name of Door
sPartitionName	Name of partition (ignored on non-partitioned systems)
sTimezoneGuid	Guid of Time Zone for the override
tScheduledTime	Time for action to occur

Note: This method is not supported for CK722 related doors.

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

DoorSetOverrideTimezoneEnableScheduled(string sUserName, string sSessionGuid, string sDoorGuid, int iEnable, datetime tScheduledTime)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorGuid	Guid of Door
iEnable	1 = override timezone enabled, 0 = override timezone disabled
tScheduledTime	Time for action to occur

Note: This method is not supported for CK722 related doors.

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

DoorSetOverrideTimezoneEnableByNameScheduled (string sUserName, string sSessionGuid, string sDoorName, string sPartitionName, int iEnable, datetime tScheduledTime)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorName	Name of Door
sPartitionName	Name of partition (ignored on non-partitioned systems)
iEnable	1 = override timezone enabled, 0 = override timezone disabled
tScheduledTime	Time for action to occur

Note: This method is not supported for CK722 related doors.

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

DoorSetSecurityLevel(string sUserName, string sSessionGuid, string sDoorGuid, int iSecurityLevel)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorGuid	Guid of Door
iSecurityLevel	Security Level (0 to 99)

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

DoorSetSecurityLevelByName(string sUserName, string sSessionGuid, string sDoorName, string sPartitionName, int iSecurityLevel)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorName	Name of Door
sPartitionName	Name of partition (ignored on non-partitioned systems)
iSecurityLevel	Security Level (0 to 99)

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

DoorSetSecurityLevelColor(string sUserName, string sSessionGuid, string sDoorGuid, int iSecurityLevelColor)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorGuid	Guid of Door
iSecurityLevelColor	0 = clear, 1 = green, 2 = blue, 3 = yellow, 4 = orange, 5 = red

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

DoorSetSecurityLevelColorByName (string sUserName, string sSessionGuid, string sDoorName, string sPartitionName, string sSecurityLevelColor)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorName	Name of Door
sPartitionName	Name of partition (ignored on non-partitioned systems)
sSecurityLevelColor	"clear", "green", "blue", "yellow", "orange", or "red"

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

DoorTimedUnlock(string sUserName, string sSessionGuid, string sDoorGuid, int iTime)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorGuid	Guid of Door
iTime	Amount of time to unlock door (in minutes: 0 to 1440)

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

DoorTimedUnlockScheduled(string sUserName, string sSessionGuid, string sDoorGuid, int iTime, datetime tScheduledTime)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorGuid	Guid of Door
iTime	Amount of time to unlock door (in minutes: 0 to 1440)
tScheduledTime	Time for action to occur

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

DoorTimedUnlockByName(string sUserName, string sSessionGuid, string sDoorName, string sPartitionName, int iTime)
Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorName	Name of Door
sPartitionName	Name of partition (ignored on non-partitioned systems)
iTime	Amount of time to unlock door (in minutes: 0 to 1440)

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

DoorTimedUnlockByNameScheduled(string sUserName, string sSessionGuid, string sDoorName, string sPartitionName, int iTime, datetime tScheduledTime)
Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorName	Name of Door
sPartitionName	Name of partition (ignored on non-partitioned systems)
iTime	Amount of time to unlock door (in minutes: 0 to 1440)
tScheduledTime	Time for action to occur

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

DoorUnlock(string sUserName, string sSessionGuid, string sDoorGuid)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorGuid	Guid of Door

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

DoorUnlockScheduled(string sUserName, string sSessionGuid, string sDoorGuid, datetime tScheduledTime)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorGuid	Guid of Door
tScheduledTime	Time for action to occur

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

DoorUnlockByName(string sUserName, string sSessionGuid, string sDoorName, string sPartitionName)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorName	Name of Door
sPartitionName	Name of partition (ignored on non-partitioned systems)

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

DoorUnlockByNameScheduled(string sUserName, string sSessionGuid, string sDoorName, string sPartitionName, datetime tScheduledTime)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sDoorName	Name of Door
sPartitionName	Name of partition (ignored on non-partitioned systems)
tScheduledTime	Time for action to occur

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

DoorUnlockAll(string sUserName, string sSessionGuid, int iUnlock, string sPartitionGuid)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
iUnlock	0 = lock, 1 = unlock
sPartitionGuid	Guid of the partition of door to unlock (ignored on non-partitioned systems)

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

DoorUnlockAllByName(string sUserName, string sSessionGuid, int iUnlock, string sPartitionName)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
iUnlock	0 = lock, 1 = unlock
sPartitionName	Name of the partition of door to unlock (ignored on non-partitioned systems)

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.6).

DoorUnlockAllScheduled(string sUserName, string sSessionGuid, int iUnlock, string sPartitionGuid, datetime tScheduledTime)
Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
iUnlock	0 = lock, 1 = unlock
sPartitionGuid	Guid of the partition of door to unlock (ignored on non-partitioned systems)
tScheduledTime	Time for action to occur

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.6).

DoorUnlockAllScheduledByName(string sUserName, string sSessionGuid, int iUnlock, string sPartitionName, datetime tScheduledTime)
Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
iUnlock	0 = lock, 1 = unlock
sPartitionName	Name of the partition of door to unlock (ignored on non-partitioned systems)
tScheduledTime	Time for action to occur

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.6).

Entity Methods

EntityGetInfo(string sUserName, string sSessionGuid, string sEntityGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sEntityGuid	Guid of Entity

Return Values

Returns a structure with the following members for the specified entity:

Member	Description
*CompanyName	Company
*DepartmentName	Department
*DivisionName	Division
*Email	Entity's email address
*EntityAddress1	Entity address line 1
*EntityAddress2	Entity address line 2
*EntityAddress3	Entity address line 3
*EntityAddress4	Entity address line 4
*EntityAddress5	Entity address line 5
*EntityAddress6	Entity address line 6
*EntityCategory	Name of Entity Category
*EntityFirstName	Entity First name (not supported for Assets)
*EntityMiddleName	Entity Middle Name (not supported for Assets)
*EntityPhone	Entity phone
*EntityType	Name of Entity Type
*TeamName	Team Name
EmployeeID	Employee ID
EntityDescription	Entity Description (Assets Only)
EntityGuid	Guid of Entity
EntityLastName	Entity Name
EntityTypeGuid	
ExpireTimeStamp	Expiration date/time of entity (UTC date/time; Jan-01-1900 00:00 = not specified)
PartitionGuid	Guid of partition which owns this entity
PartitionName	Name of the partition to which the entity belongs
Public	0 = non-public, 1 = public
StartTimeStamp	Start date/time of entity (UTC date/time; Jan-01-1900 00:00 = not specified)

Note: Fields with '*' are optional; these fields are returned if they contain data.

Version

Available in P2000 V4.0 and later.

EntityGetInfoByID(string sUserName, string sSessionGuid, string sEmployeeID)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sEmployeeID	Employee ID

Return Values

Please refer to the function EntityGetInfo(...) on page 43.

Version

Available in P2000 V4.0 and later.

EntityGetIdentifierList(string sUserName, string sSessionGuid, string sEntityGuid, string sPartitionGuid)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sEntityGuid	Guid of Entity
sPartitionGuid	Partition to search (ignored on non-partitioned system)

Return Values

Returns a structure with the following members for each access badge identifier owned by this entity:

Member	Description
FacilityCode	Facility Code
IdentifierGuid	Guid of Identifier
IdentifierNumber	Identifier Number

Version

Available in P2000 V4.0 and later.

EntityGetList(string sUserName, string sSessionGuid, string sPartitionGuid, string sFirstNameFilter, string sLastNameFilter, int iMaxCount)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionGuid	Guid of partition to be searched
sFirstNameFilter	First Name filter string
sLastNameFilter	Last Name filter string
iMaxCount	The maximum number of results to return

Notes:

1. Search filters can contain '*' or '%' to match any number of characters.
2. Search filters can contain '?' or '_' to match a single character.

Return Values

Returns a structure with the following members for each entity found:

Member	Description
EntityFirstName	Entity First name (not supported for Assets)
EntityGuid	Guid of Entity
EntityLastName	Entity Name
EntityMiddleName	Entity Middle Name (not supported for Assets and not supported when empty))
PartitionGuid	Guid of partition which owns this entity
PartitionName	Partition Name
Public	0 = non-public, 1 = public

Version

Available in P2000 V4.0 and later.

EntityGetListByName(string sUserName, string sSessionGuid, string sPartitionName, string sFirstNameFilter, string sLastNameFilter, int iMaxCount)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionName	Name of partition to be searched
sFirstNameFilter	First Name filter string
sLastNameFilter	Last Name filter string
iMaxCount	The maximum number of results to return

Notes:

1. Search filters can contain '*' or '%' to match any number of characters.
2. Search filters can contain '?' or '_' to match a single character.

Return Values

Returns a structure with the following members for each entity found:

Member	Description
EntityFirstName	Entity First name (not supported for Assets)
EntityGuid	Guid of Entity
EntityLastName	Entity Name
EntityMiddleName	Entity Middle Name (not supported for Assets and not supported when empty)
PartitionGuid	Guid of partition which owns this entity
PartitionName	Partition Name
Public	0 = non-public, 1 = public

Version

Available in P2000 V4.0 and later.

EntityGetListCount(string sUserName, string sSessionGuid, string sPartitionGuid, string sFirstNameFilter, string sLastNameFilter)
Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionGuid	Guid of partition to be searched
sFirstNameFilter	First Name filter string
sLastNameFilter	Last Name filter string

Notes:

1. Search filters can contain '*' or '%' to match any number of characters.
2. Search filters can contain '?' or '_' to match a single character.

Return Values

Returns a structure with the following members:

Member	Description
ItemValue	Item Value

Version

Available in P2000 V4.0 and later

EntityGetListCountByName(string sUserName, string sSessionGuid, string sPartitionName, string sFirstNameFilter, string sLastNameFilter)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionName	Name of partition to be searched
sFirstNameFilter	First Name filter string
sLastNameFilter	Last Name filter string

Notes

1. Search filters can contain '*' or '%' to match any number of characters.
2. Search filters can contain '?' or '_' to match a single character.

Return Values

Returns a structure with the following members:

Member	Description
ItemValue	Item Value

Version

Available in P2000 V4.0 and later.

EntityGetAllUdf(string sUserName, string sSessionGuid, string sEntityGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sEntityGuid	Guid of entity who owns the UDF Fields

Return Values

Returns a structure with the following members:

Member	Description
ItemGuid	Field GUID (this is the UDF Field GUID)
ItemName	ItemName
ItemValue	Value of the field

Version

Available in P2000 V4.0 and later.

EntityGetUdf(string sUserName, string sSessionGuid, string sEntityGuid, string sUdfGuid)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sEntityGuid	Guid of entity who owns the UDF Fields
sUDFGuid	Guid of the User Defined Field

Return Values

Returns a structure with the following members:

Member	Description
ItemGuid	Field GUID (this is the UDF Field GUID)
ItemName	ItemName
ItemValue	Value of the field

Version

Available in P2000 V4.0 and later.

EntitySetUdf(string sUserName, string sSessionGuid, string sEntityGuid, string sUdfGuid, string Value)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sEntityGuid	Guid of entity who owns the UDF Fields
sUDFGuid	Guid of the User Defined Field
Value	New Value for UDF Field

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.0 and later.

Event Methods

EventDeleteScheduled(string sUserName, string sSessionGuid, int iScheduledID)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
iScheduledID	ID of scheduled action to be deleted

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.6).

EventTrigger(string sUserName, string sSessionGuid, string sEventGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sEventGuid	Guid of Event

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

EventTriggerScheduled(string sUserName, string sSessionGuid, string sEventGuid, datetime tScheduledTime)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sEventGuid	Guid of Event
tScheduledTime	Time for action to occur

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

EventTriggerByName(string sUserName, string sSessionGuid, string sEventName, string sPartitionName)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sEventName	Name of Event
sPartitionName	Name of Partition (ignored on non-partitioned systems)

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

EventTriggerByNameScheduled(string sUserName, string sSessionGuid, string sEventName, string sPartitionName, datetime tScheduledTime)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sEventName	Name of Event
sPartitionName	Name of Partition (ignored on non-partitioned systems)
tScheduledTime	Time for action to occur

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

EventGetAllScheduled(string sUserName, string sSessionGuid, string sPartitionGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionGuid	Guid of Partition to get list for (ignored for non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Event GUID
ItemName	Event Name
PartitionGuid	Guid of partition that owns this event
PartitionName	Name of partition that owns this event
Public	0 = non-public, 1 = public
ScheduledAction	Action to be performed
ScheduledID	ID of action scheduled
ScheduledTime	Time of action

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

EventGetAllScheduledByName(string sUserName, string sSessionGuid, string sPartitionName)
Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionName	Name of Partition to get list for (ignored for non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Event GUID
ItemName	Event Name
PartitionGuid	Guid of partition that owns this event
PartitionName	Name of partition that owns this event
Public	0 = non-public, 1 = public
ScheduledAction	Action to be performed
ScheduledID	ID of action scheduled
ScheduledTime	Time of action

Version

Available in P2000 V4.1 and later (initially P2000 V3.6).

Identifier Methods

IdentifierGetInfo(string sUserName, string sSessionGuid, string sIdentifierNumber, int iFacilityCode)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sIdentifierNumber	Identifier Number
iFacilityCode	Facility Code

Return Values

Returns a structure with the following members for the specified identifier:

Member	Description
Disabled	Disable flag
EntityFirstName	Entity first name
EntityGuid	Entity Global Unique Identifier
EntityLastName	Entity last name
EntityMiddleName	Entity middle name
EventPrivelege	Event privilege level
ExpireTimestamp	UTC Expiration date/time
IssueLevel	Level of issue
PartitionGuid	Guid of partition
PartitionName	name of partition which owns this identifier
Public	0 = non-public, 1 = public
Purpose	Configured identifier purpose
Reason	Configured identifier reason
StartTimestamp	UTC Start date/time
Trace	Trace flag

Version

Available in P2000 V4.0 and later.

IdentifierGetPurpose(string sUserName, string sSessionGuid, string sIdentifierNumber, int iFacilityCode)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sIdentifierNumber	Identifier Number
iFacilityCode	Facility Code

Return Values

Returns a structure with the following members for the specified identifier:

Member	Description
Purpose	Configured identifier purpose

Version

Available in P2000 V4.0 and later.

Input Methods

InputDisable(string sUserName, string sSessionGuid, string sInputGuid, int iDisable)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sInputGuid	Guid of Input Point
iDisable	1 = disable input, 0 = enable input

Notes: This method is not supported for CK722 panels.

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

InputDisableByName(string sUserName, string sSessionGuid, string sInputName, string sPartitionName, int iDisable)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sInputName	Name of Input Point
sPartitionName	Name of Partition (ignored on non-partitioned systems)
iDisable	1 = disable input, 0 = enable input

Notes: This method is not supported for CK722 panels.

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

InputGetList(string sUserName, string sSessionGuid, string sPartitionGuid)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionGuid	Guid of Partition to get list for (ignored on non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table:

Member	Description
ItemGuid	Guid of input
ItemName	Name of input
PanelGuid	Guid of panel which contains this input
PanelName	Name of panel which contains this input
PartitionGuid	Guid of partition which owns this input
PartitionName	Name of partition which owns this input
Public	0 = non-public, 1 = public
SupportsSuppression	1 = suppression supported, 0 = suppression not supported
TerminalGuid	Guid of terminal which contains this input (blank if input contained by panel)
TerminalName	Name of terminal which contains this input (blank if input contained by panel)

Version

Available in P2000 V4.1 (initially P2000 V3.6).

InputGetListByName(string sUserName, string sSessionGuid, string sPartitionName)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionName	Name of partition to get list for (ignored on non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table:

Member	Description
ItemGuid	Guid of input
ItemName	Name of input
PanelGuid	Guid of panel which contains this input
PanelName	Name of panel which contains this input
PartitionGuid	Guid of the partition which owns this input
PartitionName	Name of the partition which owns this input
Public	0 = non-public, 1 = public

Member	Description
SupportsSuppression	1 = suppression supported, 0 = suppression not supported
TerminalGuid	Guid of terminal which owns this input (blank if input contained by panel)
TerminalName	Name of terminal which contains this input (blank if input contained by panel)

Version

Available in P2000 V4.1 (initially P2000 V3.6).

InputGetStatus(string sUserName, string sSessionGuid, string sInputGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sInputGuid	Guid of Input Point

Return Values

Returns a structure with the following members for the specified input:

Member	Description
ItemGuid	Guid of input
ItemName	Name of input
ItemStatus	Integer value of status
ItemStatusText	Text value of status
ItemStatusTimeStamp	String representation of UTC Time Stamp of last reported status change (W3C format)

The following list defines the possible item status values and their associated text. Please note that not all states are supported by all input points.

Status Value	Status Text
-1	Disabled
0	Secure
1	Set
2	Short
3	Open
4	Suppressed
5	Unknown

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

InputGetStatusByName(string sUserName, string sSessionGuid, string sInputName, string sPartitionName)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sInputName	Name of Input Point
sPartitionName	Name of Partition (ignored on non-partitioned systems)

Return Values

Please refer to the function InputGetStatus(...) on page 55.

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

InputSuppress(string sUserName, string sSessionGuid, string sInputGuid, int iDuration)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sInputGuid	Guid of Input Point
iDuration	Duration in seconds (0 to cancel suppression)

Return Values

Returns TRUE (1) if successful, FALSE (0) if not supported, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

InputSuppressByName(string sUserName, string sSessionGuid, string sInputName, string sPartition, int iDuration)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sInputName	Name of Input Point
sPartition	Name of Partition (ignored on non-partitioned systems)
iDuration	Duration in seconds (0 to cancel suppression)

Return Values

Returns TRUE (1) if successful, FALSE (0) if not supported, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

Interlock Methods

InterlockGetList(string sUserName, string sSessionGuid, string sPartitionGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
SPartitionGuid	Guid of Partition to get list for (ignored on non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Interlock Object GUID
ItemName	Interlock Object Name
PartitionGuid	Guid of the partition which owns this Interlock Object
PartitionName	Name of the partition which owns this Mutli Command Object
Public	0 = non-public, 1 = public

Version

Available in P2000 V4.1.

InterlockGetListByName(string sUserName, string sSessionGuid, string sPartitionName)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionName	Name of partition to get Interlock Object list (ignored for non-partitioned system)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Interlock Object GUID
ItemName	Interlock Object Name
PartitionGuid	Guid of the partition which owns this Interlock Object
PartitionName	Name of the partition which owns this Interlock Object
Public	0 = non-public, 1 = public

Version

Available in P2000 V4.1 and later.

InterlockGetStatus (string sUserName, string sSessionGuid, string sInterlockGuid)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sInterlockGuid	Guid of the Interlock object

Return Values

Returns a structure with the following members for the specified door:

Member	Description
ItemGuid	Interlock Object Name
ItemName	Interlock Object Name
ItemStatus	Integer value of status
ItemStatusText	Text value of status
ItemStatusTimeStamp	String representation of UTC Time Stamp of last reported status change (W3C format)

The following table lists the possible status values. Please note that depending on the associated controller not all values apply to all access points.

Status Value	Status Name
0	FALSE
1	True
2	Fault
3	Unknown

Version

Available in P2000 V4.1 and later.

InterlockAccessPointGetStatusByName (string sUserName, string sSessionGuid, string sInterlockName, string sPartitionName)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sInterlockName	Name of the Interlock object
sPartitionName	Name of the partition the access point belongs to (ignored if system is non-partitioned)

Return Values

The return value matches the value from the InterlockGetStatus(...) function.

Version

Available in P2000 V4.1 and later.

MultiCommand Methods

MultiCommandGetList(string sUserName, string sSessionGuid, string sPartitionGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
SPartitionGuid	Guid of Partition to get list for (ignored on non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Multi Command Object GUID
ItemName	Multi Command Object Name
PartitionGuid	Guid of the partition which owns this Multi Command Object
PartitionName	Name of the partition which owns this Mutli Command Object
Public	0 = non-public, 1 = public

Version

Available in P2000 V4.1.

MultiCommandGetListByName(string sUserName, string sSessionGuid, string sPartitionName)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionName	Name of partition to get Multi Command Object list (ignored for non-partitioned system)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Multi Command Object GUID
ItemName	Multi Command Object Name
PartitionGuid	Guid of the partition which owns this Multi Command Object
PartitionName	Name of the partition which owns this Multi Command Object
Public	0 = non-public, 1 = public

Version

Available in P2000 V4.1 and later.

MultiCommandGetStatus (string sUserName, string sSessionGuid, string sMultiCommandGuid)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sMultiCommandGuid	Guid of the multi command object

Return Values

Returns a structure with the following members:

Member	Description
ItemGuid	Multi Command Object GUID
ItemName	Multi Command Object Name
ItemStatus	Integer value of status
ItemStatusText	Text value of status
ItemStatusTimeStamp	String representation of UTC Time Stamp of last reported status change (W3C format)

The following table lists the possible status values. Please note that depending on the associated controller not all values apply to all access points.

Status Value	Status Name
0 to 31	State 0 to 31
32	Unknown

Version

Available in P2000 V4.1 and later.

MultiCommandGetStatusByName (string sUserName, string sSessionGuid, string sMultiCommandName, string sPartitionName)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sMultiCommandName	Name of the multi command object
sPartitionName	Name of partition to get Multi Command Object list (ignored for non-partitioned system)

Return Values

The return value matches the value from the MultiCommandGetStatus(...) function.

Version

Available in P2000 V4.1 and later.

MultiCommandSetStatus (string sUserName, string sSessionGuid, string sMultiCommandGuid, int iState)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sMultiCommandGuid	Guid of the multi command object
iState	New state for the multi command object (0 to 31)

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later.

MultiCommandSetStatusByName(string sUserName, string sSessionGuid, string sMultiCommandName, string sPartitionName, int iState)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sMultiCommandName	Name of the multi command object
sPartitionName	Name of the partition (ignored if system is not partitioned)
iState	New state for the multi command object

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later.

Output Methods

Some of the following methods refer to Output Point Actions. Not all output point actions are supported by all panel types. The following table shows the different output actions:

Output Point Actions	
Action	Name
0	Reset
1	Set
2	Slow Flash
3	Fast Flash
4	Preset
5	Pulse

Note: The CK722 related output points only support the actions ‘Reset’ and ‘Preset.’

OutputGetList(string sUserName, string sSessionGuid, string sPartitionGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionGuid	Guid of Partition to get Output list (ignored on non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Output GUID
ItemName	Output Name
PanelGuid	Guid of the panel which contains this output
PanelName	Name of the panel which contains this output
PartitionGuid	Guid of the partition which owns this output
PartitionName	Name of the partition which owns this output
Public	0 = non-public, 1 = public
TerminalGuid	Guid of the terminal which contains this output
TerminalName	Name of the terminal which contains this output

Version

Available in P2000 V4.1 (initially P2000 V3.6 SP1).

OutputGetListByName(string sUserName, string sSessionGuid, string sPartitionName)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionName	Name of partition to get Output list (ignored on non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Output Point GUID
ItemName	Output Point Name
PanelGuid	Guid of panel which contains this output
PanelName	Name of panel which contains this output
PartitionGuid	Guid of the partition which owns this output
PartitionName	Name of the partition which owns this output
Public	0 = non-public, 1 = public
TerminalGuid	Guid of terminal which owns this output (blank if output point contained by panel)
TerminalName	Name of terminal which contains this output (blank if output point contained by panel)

Version

Available in P2000 V4.1 (initially P2000 V3.6).

OutputSet(string sUserName, string sSessionGuid, string sOutputGuid, int iAction)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sOutputGuid	Guid of the output point
iAction	Refer to the Output Point Actions table on page 62

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 (initially P2000 V3.5).

OutputSetByName(string sUserName, string sSessionGuid, string sOutputName, string sPartitionName, int iAction)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sOutputName	Name of the output point
sPartitionName	Name of the partition (ignored on non-partitioned systems)
iAction	Refer to the Output Point Actions table on page 62

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 (initially P2000 V3.8).

OutputSetByNameScheduled(string sUserName, string sSessionGuid, string sOutputName, string sPartitionName, int iAction, datetime tScheduledTime)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sOutputName	Name of the output point
sPartitionName	Name of the partition (ignored on non-partitioned systems)
iAction	Refer to the Output Point Actions table on page 62
tScheduledTime	Time for action to occur

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 (initially P2000 V3.8).

OutputSetForDuration(string sUserName, string sSessionGuid, string sOutputGuid, int iAction, int iDuration)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sOutputGuid	Guid of the output point
iAction	Refer to the Output Point Actions table on page 62
iDuration	Duration in seconds (ignored if action is reset)

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 (initially P2000 V3.5).

**OutputSetForDurationByName(string sUserName, string sSessionGuid,
string sOutputName, string sPartitionName, int iAction, int iDuration)**
Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sOutputName	Name of the output point
sPartitionName	Name of partition (ignored on non-partitioned systems)
iAction	Refer to the Output Point Actions table on page 62
iDuration	Duration in seconds (ignored if action is reset)

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 (initially P2000 V3.8).

**OutputSetForDurationScheduled(string sUserName, string sSessionGuid,
string sOutputGuid, int iAction, int iDuration, datetime tScheduledTime)**
Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sOutputGuid	Guid of the output point
iAction	Refer to the Output Point Actions table on page 62
iDuration	Duration in seconds (ignored if action is reset)
tScheduledTime	Time for action to occur

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 (initially P2000 V3.5).

OutputSetForDurationByNameScheduled(string sUserName, string sSessionGuid, string sOutputName, string sPartitionName, int iAction, int iDuration, datetime tScheduledTime)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sOutputName	Name of the output point
sPartitionName	Name of partition (ignored on non-partitioned systems)
iAction	Refer to the Output Point Actions table on page 62
iDuration	Duration in seconds (ignored if action is reset)
tScheduledTime	Time for action to occur

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 (initially P2000 V3.5).

OutputSetScheduled(string sUserName, string sSessionGuid, string sOutputGuid, int iAction, datetime tScheduledTime)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sOutputGuid	Guid of the output point
iAction	Refer to the Output Point Actions table on page 62
tScheduledTime	Time for action to occur

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 (initially P2000 V3.5).

OutputGetScheduled(string sUserName, string sSessionGuid, string sOutputGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sOutputGuid	Guid of the output point

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Guid of output point
ItemName	Name of output point
ScheduledAction	Action to be performed
ScheduledID	ID of action scheduled
ScheduledParam	Override time value (only for door override action)
ScheduledTime	Time of action

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

OutputGetScheduledByName(string sUserName, string sSessionGuid, string sOutputName, string sPartitionName)
Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sOutputName	Name of the output point
sPartitionName	Name of partition (ignored on non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Guid of output point
ItemName	Name of output point
ScheduledAction	Action to be performed
ScheduledID	ID of action scheduled
ScheduledParam	Override time value (only for door override action)
ScheduledTime	Time of action

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

OutputDeleteScheduled(string sUserName, string sSessionGuid, int iScheduledID)
Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
iScheduledID	ID of scheduled action to be deleted

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

OutputGetStatus(string sUserName, string sSessionGuid, string sOutputGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sOutputGuid	Guid of output point

Return Values

Returns a structure with the following members for the specified output:

Member	Description
ItemGuid	Guid of output point
ItemName	Name of output point
ItemStatus	Integer value of status
ItemStatusText	Text value of status
ItemStatusTime	String representation of UTC Time Stamp of last reported status change (W3C format)

The following list defines the possible item status values and their associated text. Please note that not all states are supported by all output points.

Status	Name
0	Reset
1	Set
2	Unknown

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

OutputGetStatusByName(string sUserName, string sSessionGuid, string sOutputName, string sPartitionName)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sOutputName	Name of the output point
sPartitionName	Name of partition (ignored on non-partitioned systems)

Return Values

Please refer to OutputGetStatus(...).

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

P2000 Methods

P2000GetSystemInfo(string sUserName, string sSessionGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID

Return Values

Returns a structure with the following members:

Member	Description
EnterpriseSiteGuid	Enterprise Site GUID of this P2000 Site
EnterpriseSiteName	Name of this P2000 Site

Version

Available in P2000 V4.1 and later.

P2000GetVersion(string sUserName, string sSessionGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID

Return Values

Returns a structure with the following members:

Member	Description
BuildNumber	Build Number
LastUpdated	TimeStamp when P2000 was last updated or a new registration key was entered for this system
MajorVersion	Major Version Number
MinorVersion	Minor Version Number

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

P2000IsSessionValid(string sUserName, string sSession)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID

Return Values

Returns TRUE (1) if session valid, FALSE (0) is session invalid, Fault Structure if failure.

Version

Available in P2000 V4.0 and later.

P2000Login(string sUserName, string sPassword [,int iPasswordMode])**Parameters**

Argument	Description
sUserName	P2000 username
sPassword	P2000 password encrypted as configured in Site Parameters
iPasswordMode	0 = Clear Text [default], 1 = Hashed

Return Values

Returns a structure with the following members:

Member	Description
SessionGUID	Session GUID (Guid)

Version

Available in P2000 V4.0 and later.

P2000LoginHashed(string sUserName, string sPassword)**Parameters**

Argument	Description
sUserName	P2000 username
sPassword	P2000 password encrypted with SHA1 hash

Return Values

Returns a structure with the following members:

Member	Description
SessionGUID	Session GUID (Guid)

Version

Available in P2000 V4.0 and later.

P2000Logout(string sUserName, string sSession)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID

Return Values

Returns TRUE (1) if session valid, FALSE (0) is session invalid, Fault Structure if failure.

Version

Available in P2000 V4.0 and later.

Panel Methods

PanelGetComponents(string sUserName, string sSessionGuid, string sPanelGuid, string sPartitionGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPanelGuid	Guid of Panel
sPartitionGuid	Guid of Partition to get component list for (ignored for non-partitioned systems)

Note: This function is not supported for CK722 controllers.

Return Values

Returns a structure array with sections for Terminals, Inputs, and Outputs.

The terminal section contains a list of structures. Each structure represents one terminal. The data members for each terminal are:

Members for each Terminal	Description
InputTerminal	0 = not an input terminal, 1 = input terminal
ItemGuid	Guid of the terminal
ItemName	Name of the terminal
OutputTerminal	0 = not an output terminal, 1 = output terminal
PanelGuid	Guid of panel
PanelName	Name of the panel
PartitionGuid	Guid of the partition
PartitionName	Name of the partition
Public	0 = non-public, 1 = public
ReaderTerminal	0 = not a reader terminal, 1 = reader terminal

The input section contains a list of structures. Each structure represents one input point. The data members for each input point are:

Members for each Input	Description
ItemGuid	Guid of input
ItemName	name of input
PanelGuid	Guid of panel which contains this input
PanelName	Name of panel which contains this input
PartitionGuid	Guid of partition which owns this input
PartitionName	Name of the partition which owns this input
Public	0 = non-public, 1 = public
SupportsSuppression	1 = suppression supported, 0 = suppression not supported
TerminalGuid	Guid of terminal which owns this input (blank if input contained by panel)
TerminalName	Name of terminal which contains this input (blank if input contained by panel)

The output section contains a list of structures. Each structure represents one output point. The data members for each output point are:

Members for each Output	Description
ItemGuid	Guid of output
ItemName	Name of output
PanelGuid	Guid of panel which contains this output
PanelName	Name of panel which contains this output
PartitionGuid	Guid of partition which owns this output
PartitionName	Name of partition which owns this output
Public	0 = non-public, 1 = public
TerminalGuid	Guid of terminal which owns this output
TerminalName	Name of terminal which contains this output

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

PanelGetComponentsByName(string sUserName, string sSessionGuid, string sPanelName, string sPartitionName)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPanelName	Name of Panel
sPartitionName	Name of Partition to get component list for (ignored for non-partitioned systems)

Note: This function is not supported for CK722 controllers.

Return Values

Please refer to the function PanelGetComponents(...) starting on page 71 for a detailed information about the return values.

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

PanelGetList(string sUserName, string sSessionGuid, string sPartitionGuid)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionGuid	Guid of Partition to get Panel list for (ignored on non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Panel GUID
ItemModel	Model Name of panel
ItemModelType	Hardware module type: 1 - CK720, 2 - CK705, 10 - CK722
ItemName	Panel Name
PartitionGuid	Guid of the partition which owns this panel
PartitionName	Name of the partition which owns this panel
Public	0 = non-public, 1 = public

Version

Available in P2000 V4.1 (initially P2000 V3.6).

PanelGetListByName(string sUserName, string sSessionGuid, string sPartitionName)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionName	Name of Partition to get Panel list for (ignored on non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Panel GUID
ItemModel	Model Name of panel (i.e. 'CK720,' 'CK722,' 'CK705')
ItemModelType	Hardware module type: 1 - CK720, 2 - CK705, 10 - CK722
ItemName	Panel Name
PartitionGuid	Guid of the partition which owns this panel
PartitionName	Name of the partition which owns this panel
Public	0 = non-public, 1 = public

Version

Available in P2000 V4.1 (initially P2000 V3.6).

PanelGetTimezones(string sUserName, string sSessionGuid, string sPanelGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPanelGuid	Guid of Panel

Note: This method is not supported for CK722 panels.

Return Values

This function returns an array of structures with the following members for every timezone assigned to the specified panel:

Member	Description
OutputGroupGuid	Guid of output group (<Null> if none)
OutputGroupName	Name of output group (<Null> if none)
TimezoneGuid	Guid of Timezone (<Null> if none)
TimezoneName	Name of timezone (<Null> if none)
TimezonePosition	Position of timezone

Version

Available in P2000 V4.1 (initially P2000 V3.5).

PanelGetTimezonesByName(string sUserName, string sSessionGuid, string sPanelName, string sPartitionName)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPanelName	Name of Panel
sPartitionName	Name of Partition (ignored on non-partitioned systems)

Note: This method is not supported for CK722 panels.

Return Values

This function returns an array of structures with the following members for every timezone assigned to the specified panel:

Member	Description
OutputGroupGuid	Guid of output group (<Null> if none)
OutputGroupName	Name of output group (<Null> if none)
TimezoneGuid	Guid of Timezone (<Null> if none)
TimezoneName	Name of timezone (<Null> if none)
TimezonePosition	Position of timezone

Version

Available in P2000 V4.1 (initially P2000 V3.5).

PanelModifyTimezone(string sUserName, string sSessionGuid, string sPanelGuid, int iTimezonePos, string sTimezoneGuid, string sOutputGroupGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPanelGuid	Guid of Panel
iTimezonePos	Position of Timezone (1 to 64)
sTimezoneGuid	Guid of Timezone (<Null> if none)
sOutputGroupGuid	Guid of Output Group (<Null> if none)

Note: This method is not supported for CK722 panels.

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 (initially P2000 V3.5).

PanelModifyTimezoneByName(string sUserName, string sSessionGuid, string sPanelName, string sPartitionName, int iTimezonePos, string sTimezoneName, string sOutputGroupName)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPanelName	Name of Panel
sPartitionName	Name of Partition (ignored on non-partitioned systems)
iTimezonePos	Position of Timezone (1 to 64)
sTimezoneName	Name of Timezone (<Null> if none)
sOutputGroupName	Name of Output Group (<Null> if none)

Note: This method is not supported for CK722 panels.

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 (initially P2000 V3.5).

Partition Methods

PartitionGetList(string sUserName, string sSessionGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID

Return Values

This function returns an array of structure with the values defined in the following table:

Member	Description
PartitionGuid	Guid of partition
PartitionName	Name of partition

Version

Available in P2000 V4.1 (initially P2000 V3.6).

Request Queue Methods

RequestQueueAdd(string sUserName, string sSessionGuid, string sRequestXml)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 password or session GUID
sRequestXml	P2000 Entity Request XML document

Return Values

Returns an array of structures with the following members for each partition:

Member	Description
PartitionName	Name of partition
PartitionGuid	Guid of partition

Version

Available in P2000 V3.6 and later.

Obsolete in P2000 V4.0 and later.

Team Methods

TeamGetList(string sUserName, string sSessionGuid, string sPartitionGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
SPartitionGuid	Guid of Partition to get list for (ignored on non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Team GUID
ItemName	Team Name
PartitionGuid	Guid of the partition which owns this team
PartitionName	Name of the partition which owns this team
Public	0 = non-public, 1 = public

Version

Available in P2000 V4.1.

TeamGetListByName(string sUserName, string sSessionGuid, string sPartitionName)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionName	Name of partition to get team list (ignored for non-partitioned system)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Team GUID
ItemName	Team Name
PartitionGuid	Guid of the partition which owns this team
PartitionName	Name of the partition which owns this team
Public	0 = non-public, 1 = public

Version

Available in P2000 V4.1 and later.

Terminal Methods

TerminalGetList(string sUserName, string sSessionGuid, string sPartitionGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionGuid	Guid of Partition to get terminal list for (ignored on non-partitioned systems)

Note: This function does not return CK722 components.

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
InputTerminal	0 = not an input terminal, 1 = input terminal
ItemGuid	Guid of terminal
ItemName	Name of terminal
OutputTerminal	0 = not an output terminal, 1 = output terminal
PanelGuid	Guid of panel which contains this terminal
PanelName	Name of panel which contains this terminal
PartitionName	Name of partition which owns this terminal
Public	0 = non-public, 1 = public
ReaderTerminal	0 = not a reader terminal, 1 = reader terminal

Version

Available in P2000 V4.1 and later.

TerminalGetListByName(string sUserName, string sSessionGuid, string sPartitionName)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionName	Name of Partition to get terminal list for (ignored on non-partitioned systems)

Note: This function does not return CK722 components.

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
InputTerminal	0 = not an input terminal, 1 = input terminal
ItemGuid	Guid of terminal
ItemName	Name of terminal
OutputTerminal	0 = not an output terminal, 1 = output terminal

Member	Description
PanelGuid	Guid of panel which contains this terminal
PanelName	Name of panel which contains this terminal
PartitionName	name of partition which owns this terminal
Public	0 = non-public, 1 = public
ReaderTerminal	0 = not an reader terminal, 1 = reader terminal

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

Timezone Methods

TimezoneAdd(string sUserName, string sSessionGuid, string sTimezoneName, string sTimezoneGuid, string sPartitionGuid, int iPublic, int iAddToAllPanels, int iInitialStates, datetime array tTimes)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sTimezoneName	Name of the time zone
sTimezoneGuid	Guid of the time zone (auto assigned if NULL)
sPartitionGuid	Guid of the partition which owns this time zone (ignored for non-partitioned systems)
iPublic	0 = non-public (default for non-partitioned systems), 1 = public
iAddToAllPanels	0 = do not add to CK720/CK705 panels, 1 = add to CK720/CK705 panels
iInitialStates	Array of 10 initial states (0 = starts disabled at midnight, 1 = starts enabled at midnight)
tTimes	Array of 70 time zone toggles (ignored if 00:00:00)

Notes:

1. This method does not support setting elevator floor groups settings of timezones.
2. This method does not support adding the timezone to CK722 controllers.

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

TimezoneAddByName(string sUserName, string sSessionGuid, string sTimezoneName, string sTimezoneGuid, string sPartitionName, int iPublic, int iAddToAllPanels, int iInitialStates, datetime array tTimes)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sTimezoneName	Name of the time zone
sTimezoneGuid	Guid of the time zone (auto assigned if NULL)
sPartitionName	Name of the partition which owns this timezone (ignored for non-partitioned systems)
iPublic	0 = non-public (default for non-partitioned systems), 1 = public
iAddToAllPanels	0 = do not add to CK720/CK705 panels, 1 = add to CK720/CK705 panels
iInitialStates	Array of 10 initial states (0 = starts disabled at midnight, 1 = starts enabled at midnight)
tTimes	Array of 70 time zone toggles (ignored if 00:00:00)

Notes:

1. This method does not support setting elevator floor groups settings of timezones.
2. This method does not support adding the timezone to CK722 controllers.

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.5).

TimezonelsActive(string sUserName, string sSessionGuid, string sTimezoneGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sTimezoneGuid	Guid of the time zone

Return Values

Returns TRUE (1) if Timezone is active, FALSE (0) if inactive, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.6 SP1).

TimezonesActiveByName(string sUserName, string sSessionGuid, string sTimezoneName, string sPartitionName)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sTimezoneName	Name of the time zone
sPartitionName	Name of partition (ignored on non-partitioned systems)

Return Values

Returns TRUE (1) if Timezone is active, FALSE (0) if inactive, Fault Structure if failure.

Version

Available in P2000 V4.1 and later (initially P2000 V3.8).

TimezoneGetInfo(string sUserName, string sSessionGuid, string sTimezoneGuid)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sTimezoneGuid	Guid of the time zone

Return Values

Returns a structure with the following members for the specified timezone:

Member	Description
InitialStates	An array of 10 initial states (0 = disabled at midnight, 1 = enabled at midnight)
ItemGuid	Guid of Timezone
ItemName	Name of Timezone
PartitionGuid	Guid of partition which owns this timezone
PartitionName	Name of partition which owns this timezone
Public	0 = non-public, 1 = public
ToggleTimes	An array of 70 timezone toggles (unused if 00:00:00)

Version

Available in P2000 V4.1 and later (initially P2000 V3.6 SP1).

TimezoneGetInfoByName(string sUserName, string sSessionGuid, string sTimezoneName, string sPartitionName)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sTimezoneName	Name of the time zone
sPartitionName	Name of partition (ignored on non-partitioned systems)

Return Values

Returns a structure with the following members for the specified timezone:

Member	Description
InitialStates	An array of 10 initial states (0 = disabled at midnight, 1 = enabled at midnight)
ItemGuid	Guid of Timezone
ItemName	Name of Timezone
PartitionGuid	Guid of partition which owns this timezone
PartitionName	Name of partition which owns this timezone
Public	0 = non-public, 1 = public
ToggleTimes	An array of 70 timezone toggles (unused if 00:00:00)

Version

Available in P2000 V4.1 and later (initially P2000 V3.6 SP1).

TimezoneGetList(string sUserName, string sSessionGuid, string sPartitionGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionGuid	Guid of Partition to get Timezone list for (ignored on non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Timezone GUID
ItemName	Timezone Name
PartitionGuid	Guid of partition which owns this timezone
PartitionName	Name of partition which owns this timezone
Public	0 = non-public, 1 = public

Version

Available in P2000 V4.1 (initially P2000 V3.6 SP1).

TimezoneGetListByName(string sUserName, string sSessionGuid, string sPartitionName)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionName	Name of Partition to get Timezone list for (ignored on non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	Timezone GUID
ItemName	Timezone Name
PartitionGuid	Guid of the partition which owns this timezone
PartitionName	Name of the partition which owns this timezone
Public	0 = non-public, 1 = public

Version

Available in P2000 V4.1 (initially P2000 V3.6 SP1).

TimezoneModify(string sUserName, string sSessionGuid, string sTimezoneGuid, int iInitialState, datetime array tTimes)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sTimezoneGuid	Guid of the time zone
iInitialStates	Array of 10 initial states (0 = starts disabled at midnight, 1 = starts enabled at midnight)
tTimes	Array of 70 time zone toggles (ignored if 00:00:00)

Note: This method does not support setting elevator floor group settings of timezones.

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 (initially P2000 V3.5).

TimezoneModifyByName(string sUserName, string sSessionGuid, string sTimezoneName, string sPartitionName, int iInitialState, datetime array tTimes)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sTimezoneName	Name of the time zone
sPartitionName	Name of Partition (ignored on non-partitioned systems)
iInitialStates	Array of 10 initial states (0 = starts disabled at midnight, 1 = starts enabled at midnight)
tTimes	Array of 70 time zone toggles (ignored if 00:00:00)

Note: This method does not support setting elevator floor group settings of timezones.

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 (initially P2000 V3.5).

TimezoneDelete(string sUserName, string sSessionGuid, string sTimezoneGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sTimezoneGuid	Guid of the time zone

Notes:

1. The timezone will be deleted from all panels and all access profiles that are assigned this timezone.
2. Removing a time zone from an access profile will also remove the associated access group.

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 (initially P2000 V3.5).

TimezoneDeleteByName(string sUserName, string sSessionGuid, string sTimezoneName, string sPartitionName)**Parameters**

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sTimezoneName	Name of the time zone
sPartitionName	Name of partition (ignored on non-partitioned systems)

Notes:

1. The timezone will be deleted from all panels and all access profiles that are assigned this timezone.
2. Removing a time zone from an access profile will also remove the associated access group.

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 (initially P2000 V3.5).

UDF Methods

UdfGetList(string sUserName, string sSessionGuid, string sPartitionGuid)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionGuid	Guid of Partition to get UDF list for (ignored on non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	UDF Guid
ItemName	UDF Name
ItemType	Data type of a field
ItemWidth	Width of UDF field
PartitionGuid	Guid of partition which owns this UDF
PartitionName	Name of partition which owns this UDF
Public	0 = non-public, 1 = public

Version

Available in P2000 V4.1 (initially P2000 V3.6).

UdfGetListByName(string sUserName, string sSessionGuid, string sPartitionName)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
sPartitionName	Name of Partition to get UDF list for (ignored on non-partitioned systems)

Return Values

This function returns an array of structure with the values defined in the following table.

Member	Description
ItemGuid	UDF Guid
ItemName	UDF Name
ItemType	Data type of a field
ItemWidth	Width of UDF field
PartitionGuid	Guid of partition which owns this UDF
PartitionName	Name of partition which owns this UDF
Public	0 = non-public, 1 = public

Version

Available in P2000 V4.1 (initially P2000 V3.6).

XAction Methods

XActionSave(string sUserName, string sSessionGuid, int iHistMainType, int iHistSubType, string sPanelName, string sTerminalName, string sPointName, string sIdentifierNumber, string sFirstName, string sLastName, int iTimedOverride, int ilssueLevel, int iFacilityCode, string sEventName, datetime tTime, string sPartition, int iPublic, string sDescription, string sCompany, string sDivision, string sDepartment, string sTeam)

Parameters

Argument	Description
sUserName	Valid P2000 username
sSessionGuid	Valid P2000 session GUID
iHistMainType	History Main Type
iHistSubType	History Sub Type
sPanelName	Name of Panel
sTerminalName	Name of Terminal
sPointName	Name of Point (input/output)
sIdentifierNumber	Identifier Number
sFirstName	First Name
sLastName	Last Name
iTimedOverride	Override Time
ilssueLevel	Issue Level of Identifier
iFacilityCode	Facility Code of Identifier
sEventName	Name of Event
tTime	Timestamp of transaction
sPartition	Name of partition which owns this action
iPublic	0 = non-public, 1 = public
sDescription	Description
sCompany	Entity's company name
sDivision	Entity's division name
sDepartment	Entity's department name
sTeam	Entity's team name

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later.

P2000 ECCC Method List

The P2000 Enterprise Command and Control Center functionality utilizes a set of XML RPC functions. These XML RPC functions are listed in this section.

The main difference between these functions and those listed as “Traditional Method” is that the P2000 ECCC functions leverage the data driven components of the P2000 Version 4.1 application.

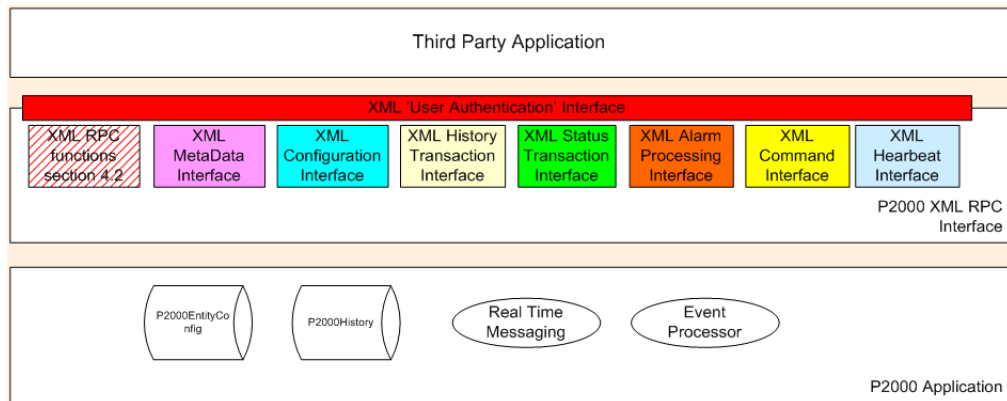


Figure 2: P2000 ECCC XML RPC Components

As illustrated in Figure 2, the P2000 ECCC Methods are an extension to the traditional methods, and the consumer (i.e. the third party application) can choose the XML RPC methods that are most applicable for it.

The following sections outline the XML RPC functions for:

- User Authentication
- Configuration Interface
- History Transaction Interface
- Status Transaction Interface
- Alarm Processing Interface
- Command Interface

You should note that this interface, in multiple areas supports name, values (numbers), and GUIDs. We strongly recommend that third party applications leverage the GUID provided, and if necessary, leverage the Item Sub Type’s Metadata information to translate numeric values contain in, for example, XML RMS messages into the associated GUID.

The main reason for this recommendation is that future P2000 versions may change the values (numbers) or names for items, but will retain the specified GUIDs.

User Authentication

The XML RPC “User Authentication” allows the third party application to authenticate a user and obtain a session GUID, as well as terminate a session by logging out.

The XML RPC “User Authentication” supports the following XML RPC functions:

- P2000Login(Username, Password, PasswordMode)
- P2000Logout(Username, SessionGuid)
- P2000IsSessionValid(Username, SessionGuid)
- P2000ImpersonateUser(Username, SessionGuid, NewUserName)

The first three methods are described in “P2000 Methods” on page 69.

P2000ImpersonateUser(string sUserName, string sSessionGuid, string sNewUserName)

This method allows the currently existing connection, which is identified by the Username and SessionGuid to create another session for the user with the user name ‘NewUserName.’

Parameters

Argument	Description
sUserName	P2000 username
sSessionGuid	Current P2000 session GUID
sNewUserName	New P2000 user name

Return Values

The method returns a structure with the P2000 session GUID. If the login succeeds, the value of the session GUID is to be used in conjunction with the new user name for subsequent RPC calls. If the session GUID is an empty string, then the authentication of the new user account failed.

Member	Description
SessionID	Session GUID (Guid) [Empty if login failed]

Note: Please note that the original RPC session remains active.

Version

Available in P2000 V4.1 and later.

Meta Data Interface

The XML RPC Configuration Interface supports the following metadata related XML RPC functions:

- GetItemTypeList(Username, SessionGuid)
- GetItemSubTypeList(Username, SessionGuid, xmlDoc)
- GetItemSubTypeInfo(Username, SessionGuid, xmlDoc)

In addition, the traditional methods associated with the P2000 Methods (page 69) **P2000GetVersion** and **P2000GetSytemInfo**, are required.

As P2000 metadata information is only modified, when a new version of P2000 is loaded, third party applications are encouraged to retrieve this configuration information once, and retain it within their own repository.

The method P2000GetVersion(...) outlined on page 69, can be used to determine whether the information cached by the third party application needs to be updated.

GetItemTypeList(string UserName, string SessionGuid)

This method allows the third party application to retrieve the defined item types currently defined within the P2000 system.

Parameters

Argument	Description
sUserName	P2000 username
sSessionGuid	Current P2000 session GUID

Return Value

When successful, the function returns a structure containing a string representing an XML document.

Member	Description
XmlDoc	String representation of the XML document

The XML document will have the following structure:

```
<P2000Reply>
  <ItemTypes>
    <ItemType>
      <Name>Name of the Item Type</Name>
      <Guid>GUID of the Item Type</Guid>
      <Number>Number of the Item Type</Number>
    </ItemType>
  </ItemTypes>
</P2000Reply>
```

Note: The GUIDs of the Item Types will be the same in all P2000 systems. The name of the item type will be in English and may change within different version of P2000.

GetItemSubTypeList(string UserName, string SessionGuid, string xmlDoc)

This method allows third party applications to retrieve the known list of P2000 Item Sub Types.

Parameters

Argument	Description
sUserName	P2000 username
sSessionGuid	Current P2000 session GUID
xmlDoc	String representation of an XML document defining the filter criteria

The string representation of the XML document matches one of the schemas outlined in the following sections:

Filter Schema 1 Retrieve all known Item Sub Types

```
<P2000Request>
  <GetItemSubTypeList>
    <ItemSubTypeFilter>
    </ItemSubTypeFilter>
  </GetItemSubTypeList>
</P2000Request>
```

Filter Schema 2 Retrieve all Item Sub Types that are children of a known Item Sub Type

```
<P2000Request>
  <GetItemSubTypeList>
    <ItemSubTypeFilter>
      <ItemSubTypeGuid>GUID of the Item Sub Type</ItemSubTypeGuid>
    </ItemSubTypeFilter>
  </GetItemSubTypeList>
</P2000Request>
```

This schema is used to retrieve all item sub types that can be children of the specified item sub type. If the specified GUID is *GUID.Empty*, then only those item sub types, which can be the root level sub types, will be returned.

Filter Schema 3 Retrieve all Item Sub Types associated with a specific item types

```
<P2000Request>
  <GetItemSubTypeList>
    </ItemSubTypeFilter>
      <ItemTypeGuid>GUID of the Item Type</ItemTypeGuid>
    </ItemSubTypeFilter>
  </GetItemSubTypeList>
</P2000Request>
```

This schema is used to retrieve all item sub types that are of the specified item type. The specified GUID cannot be *GUID.Empty*.

Return Values

When successful the function returns a structure containing a string representing an XML document.

Member	Description
XmlDoc	String representation of the XML document

The XML document will have the following structure

```
<P2000Reply>
  <ItemSubTypes>
    <ItemSubType>
      <Name>Name of the Item Sub Type</Name>
      <Guid>GUID of the Item Sub Type</Guid>
      <Number>Number of the Item Sub Type</Number>
    </ItemSubType>
  </ItemSubTypes>
</P2000Reply>
```

GetItemSubTypeInfo(string UserName, string SessionGuid, string xmlDoc)

This method retrieves detailed metadata information for the specified an item sub type.

Parameters

Argument	Description
sUserName	P2000 username
sSessionGuid	Current P2000 session GUID
xmlDoc	String representation of an XML document defining the filter criteria

The string representation of the XML document matches one of the schemas outlined below:

```
<P2000Request>
  <GetItemSubTypeInfo>
    <ItemSubType>
      <ItemSubTypeGuid>GUID of the Item Sub Type</ItemSubTypeGuid>
      <Version>Version</Version>
      <MetaDataTypes>
        <MetaDataType>Type of metadata to be retrieved</MetaDataType>
      </MetaDataTypes>
    </ItemSubType>
  </GetItemSubTypeInfo>
</P2000Request>
```

The following table provides additional information for each of these parameters.

Parameter	Description
ItemSubTypeGuid	The GUID of the item sub type for which the metadata is to be retrieved
Version	Version Number for which the metadata is to be retrieved (0 = all version) Note: This parameter is currently ignored
MetaDataType	Defines the type of metadata to be retrieved. Known metadata types are: <ul style="list-style-type: none"> • ConfigInterfaceSupport • ItemTypes • Commands • States • HistoryTypes When omitted, all metadata types are provided.

Return Value

When successful the function returns a structure containing a string representing an XML document.

Member	Description
XmlDoc	String representation of the XML document

The following outlines the structure of the returned XML document. Please note, that the sections “*Commands*,” “*States*,” “*HistoryTypes*,” and “*Alarm Types*” depend on the version requested.

The entries for the commands also provide the command parameters associated with the command. For each of the parameters, the XML document contains the type information. If the type is a string or an integer, the subsequent elements define minimum, maximum, and default information.

Detailed specification for each of these parameters and which parameters are required, when executing the command, need to be provided as part of the Item Sub Type definition.

```

<P2000Reply>
  <ItemSubTypeDetails>
    <ItemSubTypeInfo>
      <Guid>Guid of the ItemSubType</Guid>

      <Versions>
        <Version>
          <Number>VersionNumber</Number>
          <UnknownStateGuid>Status GUID of the 'Unknown'
            state</UnknownStateGuid>

          <ConfigurationInterfaceSupport>
            <CreateItem>Defines whether the function 'CreateItem'
              is supported (1) or not (0)</CreateItem>
            <ReadItem>Defines whether the function 'ReadItem' is
              supported (1) or not (0)</ReadItem>
            <EditItem> Defines whether the function 'EditItem' is
              supported (1) or not (0)</EditItem>
            <DeleteItem> Defines whether the function 'DeleteItem'
              is supported (1) or not (0)</DeleteItem>

          <SupportedFeatures>
            <Partition>Defines whether item supports partitions
              (2) supports partitioning through P2000
              (1) or does not support partitioning
              (0)</Partition>
            <QueryString>Defines whether the item supports query
              strings (2), supports query string
              through P2000 (1) or does not support
              query strings (0)</QueryString>
          </SupportedFeatures>

          <DataFields>
            <DataField>
              <Name>Name of the data field</Name>
              <Type>Type of the data field (String, Int, GUID,
                ReferenceGuid)</Type>
              <MinValue>Defines min value for integer type,
                omitted if data type is not
                integer</MinValue>
              <MaxValue>Defines max value for integer type,
                omitted if data type is not
                integer</MaxValue>
              <MinLength>Defines min length for string type,
                omitted if data type is not a
                string</MinLength>
              <MaxLength>Defines max length for string type,
                omitted if data type is not a
                string</MaxLength>
            </DataField>
          </DataFields>
        </ConfigurationInterfaceSupport>

      <ItemTypes>
        <ItemType>
          <Guid>Guid of Item Type</Guid>
          <Name>Name of Item Type</Name>
          <Number>Number of Item Type</Number>

```

```

    </ItemType>
  </ItemTypes>

  <IconImageSetTypes>
    <IconImageSetTypes>
      <Guid>Guid of Icon Image Set Type</Guid>
      <Name>Name of Icon Image Set Type</Name>
      <Number>Number of Image Set Type</Number>
    </IconImageSetType>
  </IconImageSetTypes>

  <Commands>
    <Command>
      <Guid>Guid of command</Guid>
      <Name>Command Name</Name>
      <Number>Number of Command</Number>

      <AuditActionGuid>Guid of Audit Action</AuditActionGuid>
      <Parameters>
        <Parameter>
          <Name>Parameter Name</Name>
          <Type>ParameterType</Type>
          <Minimum>Minimum Value or Length</Minimum>
          <Maximum>Maximum Value or Length</Maximum>
          <Default>Default Value</Default>
        </Parameter>
      </Parameters>
    </Command>
  </Commands>

  <HistoryTypes>
    <HistoryType>
      <Guid>Guid of history type</Guid>
      <Name>History Type Name</Name>
      <Number>History Type Value</Number>
    </HistoryType>
  </HistoryTypes>

  <States>
    <State>
      <Guid>Guid of item state</Guid>
      <Name>Item State Name</Name>
      <Number>Item State Value</Number>
    </State>
  </States>

  <AlarmTypes>
    <Alarm Type>
      <Guid>Guid of alarm type</Guid>
      <Name>Name of alarm type</Name>
      <Number>Number of alarm type</Number>
      <ConditionStates>
        <ConditionState>
          <Guid>Guid of condition state</Guid>
          <Name>Condition State Name</Name>
          <Number>Condition State Value</Number>

          <ConditionType>ConditionType</ConditionType>
          <CompletionState>CompletionState</CompletionState>
        </ConditionState>
      </ConditionStates>
    </Alarm Type>
  </AlarmTypes>

```

```

    <Auditing>
      </AuditItem>
      <Guid>Guid of Audit Item</Guid>
      <Name>Name of the Audit Item</Name>
      <Number>Number of Audit Item</Number>
      <AuditActions>
        <AuditAction>
          <Guid>Guid of Audit Action</Guid>
          <Name>Name of Audit Action</Name>
          <Number>Number of Audit Action</Number>
        </AuditAction>
      </AuditActions>
    </Auditing>

    <HostEvents>
      <EventTriggers>
        <EventTrigger>
          <Guid>Event Trigger GUID</Guid>
          <Name>Event Trigger Name</Name>
          <Number>Event Trigger Number</Number>

          <HistoryTypeGuid>Guid of History Type</HistoryTypeGuid>
          <StatusTypeGuid>Guid of Status</StatusTypeGuid>
          <StateType>Type of State</StateType>

          <ConditionTypes>
            <ConditionType>
              <Guid>Guid of Condition Type</Guid>
              <Name>Name of Condition Type</Name>
              <Number>Number of Condition Type</Number>
              <LogicConditions>
                <LogicCondition>
                  <Guid>Guid of Logic Condition</Guid>
                  <Name>Name of Logic Condition</Name>
                  <Number>Number of Logic Condition</Number>
                </LogicCondition>
              </LogicConditions>
            </ConditionType>
          </ConditionTypes>
        </EventTrigger>
      </EventTriggers>
    </HostEvents>

    <HistoryProcessingRules>
      <HistoryProcessingRule>
        <HistoryGuid>Guid of History Type</HistoryTypeGuid>
        <DefaultStatusGuid>Default Status GUID</DefaultStatusGuid>
        <StatusList>
          <StatusGuid>Guid of a possible status</StatusGuid>
        </StatusList>
        <AlarmConditions>
          <AlarmTypeCondition>
            <AlarmTypeGuid>Guid of Alarm Type</AlarmTypeGuid>
            <AlarmCondGuid>Guid of Alarm Condition</AlarmCondGuid>
          </AlarmTypeCondition>
        </AlarmConditions>
      </HistoryProcessingRule>
    </HistoryProcessingRules>

    <Version>
  </Versions>
</ItemSubTypeInfo>
</ItemSubTypeDetails>
</P2000Reply>

```

Configuration Interface

GetItemList(string UserName, string SessionGuid, string xmlDoc)

This method is used to return a list of known P2000 items based on the filter criteria provided within the XML document.

Parameters

Argument	Description
sUserName	P2000 username
sSessionGuid	Current P2000 session GUID
xmlDoc	String representation of an XML document defining the filter criteria

The string representation of the XML document matches one of the schemas outlined below:

```
<P2000Request>
  <GetItemList>
    <ItemFilter>
      <ItemSubTypeGuid>GUID of the Item Sub Type</ItemSubTypeGuid>
      <ItemTypeGuid>GUID of the Item Sub Type</ItemTypeGuid>
      <ItemName>Name of Item</ItemName>
      <ItemGuid>Guid of the Item</ItemGuid>

      <PartitionGuid>Partition GUID, not supported in
                        non-partitioned system</PartitionGuid>
      <PartitionName>Partition Name, not supported in
                        non-partitioned system</PartitionName>

      <ParentGuid>Parent GUID</ParentGuid>

      <EnterpriseSiteGuid>GUID of Enterprise Site</EnterpriseSiteGuid>
    </ItemFilter>
  </GetItemList>
</P2000Request>
```

When providing a filter to the function, the following rules apply:

1. An ItemSubTypeGuid or an ItemTypeGuid has to be provided.
2. When providing an ItemName based filter, a Partition Name or Partition GUID must be provided.
3. A parent guid can be provided, when provided only direct children of this item will be returned (Guid.Empty = only root items are returned). If omitted all items meeting the other filter criteria will be provided.
4. A filter definition can contain either a PartitionName or a PartitionGuid.
5. If no enterprise site guid is provided, it returns the local P2000 site.

Return Value

When successful the function returns a structure containing a string representing an XML document.

Member	Description
XmlDoc	String representation of the XML document

The XML document provides the following information:

```
<P2000Reply>
  <ItemList>
    <Item>
      <ItemSubTypeGuid>GUID of the Item Sub Type</ItemSubTypeGuid>
      <ItemGuid>Guid of Item</ItemGuid>
      <ItemName>Name of Item</ItemName>

      <PartitionGuid>Partition GUID</PartitionGuid>
      <PartitionName>Partition Name </PartitionName>
      <IsPublic>Non-public (0) or public (1)</IsPublic>

      <ParentGuid>Parent GUID</ParentGuid>

      <EnterpriseSiteGuid>GUID of Enterprise Site</EnterpriseSiteGuid>
      <Version>Version Number of this Item</Version>
    </Item>
  </ItemList>
</P2000Request>
```

CreateItem(string UserName, string SessionGuid, string xmlDoc)

This method is used to create a P2000 item based on the specified xmlDoc. Please note that items can only be created within the local P2000 system. In addition not all item sub types support the “CreateItem” method. Please refer to the item sub type’s metadata for more detailed information.

Parameters

Argument	Description
sUserName	P2000 username
sSessionGuid	Current P2000 session GUID
xmlDoc	String representation of an XML document defining the filter criteria

The string representation of the XML doc matches one of the schemas outlined below:

```
<P2000Request>
  <CreateItem>
    <ItemSubTypeGuid>P2000 Item Sub Type GUID</ItemSubTypeGuid>
    <ItemGuid>Item GUID</ItemGuid>
    <ItemName>Item Name</ItemName>
    <Version>Version Number</VersionNumber>
    <ParentGuid>Parent GUID</ParentGuid>

    <PartitionGuid>Partition GUID, not supported in
                                non-partitioned system</PartitionGuid>
    <PartitionName>Partition Name, not supported in
                                non-partitioned system</PartitionName>
    <IsPublic>Public (1) or not (0), not supported in
                                non-partitioned system</IsPublic>

    <QueryString>Query String</QueryString>

    <DataFields>
      <DataField>
        <Name>Name of Data Field</Name>
```

```

    <Value>Value of Data Field</Value>
  </DataField>
</DataFields>
</CreateItem>
</P2000Request>

```

Item Sub Type GUID	P2000 Item Sub Type GUID
Item GUID	Item GUID (unique for all P2000 sites, can be omitted)
Item Name	Name of Item (unique within P2000 Item Type for this P2000 Enterprise Site)
Version	Version Number for this Item
Parent GUID	Parent GUID of P2000 Item owning this item
Partition GUID	P2000 Partition GUID (ignored if system is non-partitioned)
Partition Name	P2000 Partition Name (ignored if system is non-partitioned)
IsPublic	Determines whether the item is public or not
QueryString	Query String

Return Values

Returns a fault structure is unsuccessful and otherwise a structure with the following members:

Member	Description
ItemGuid	Item GUID

Version

Available in P2000 V4.1 and later.

ReadItem(string UserName, string SessionGuid, string xmlDoc)

This method is used to read the configuration information of a P2000 item based on the specified xmlDoc. Please note, that items can only be read within the local P2000 system. In addition not all item sub types support the “ReadItem” method. Please refer to the item sub type’s metadata for more detailed information.

Parameters

Argument	Description
sUserName	P2000 username
sSessionGuid	Current P2000 session GUID
xmlDoc	String representation of an XML document defining the filter criteria

The string representation of the XML doc matches one of the schemas outlined below:

```

<P2000Request>
  <ReadItem>
    <ItemFilter>
      <ItemSubTypeGuid>P2000 Item Sub Type GUID</ItemSubTypeGuid>
      <ItemGuid>Item GUID</ItemGuid>

      <ItemName>Item Name</ItemName>
      <PartitionGuid>Partition GUID, not supported in
                        non-partitioned system</PartitionGuid>
      <PartitionName>Partition Name, not supported in
                        non-partitioned system</PartitionName>
    </ItemFilter>

    <DataFields>

```

```

    <DataField>
      <Name>Name of Data Field</Name>
    </DataField>
  </DataFields>
</ReadItem>
</P2000Request>

```

If the data fields node does not contain any specific data fields, the XML document will contain all properties associated with the item.

Return Value

When successful the function returns a structure containing a string representing an XML document.

Member	Description
XmlDoc	String representation of the XML document

The XML document provides the following information:

```

<P2000Reply>
  <ItemInfo>
    <ItemSubTypeGuid>P2000 Item Sub Type GUID</ItemSubTypeGuid>
    <ItemGuid>Item GUID</ItemGuid>
    <ItemName>Item Name</ItemName>
    <Version>Version Number</VersionNumber>
    <ParentGuid>Parent GUID</ParentGuid>

    <PartitionGuid>Partition GUID, not supported in
                    non-partitioned system</PartitionGuid>
    <PartitionName>Partition Name, not supported in
                    non-partitioned system</PartitionName>
    <IsPublic>Public (1) or not (0), not supported in
                    non-partitioned system</IsPublic>

    <QueryString>Query String</QueryString>

    <DataFields>
      <DataField>
        <Name>Name of Data Field</Name>
        <Value>Value of Data Field</Value>
      <DataField>
        <Name>Name of Data Field</Name>
        <Value>Value of Data Field</Value>
      </DataField>
    </DataField>
  </DataFields>
</CreateItem>
</P2000Request>

```

Note: A date field will either have a value element (yellow) or another data field as value element. The name of the data fields are based on the P2000 property agents.

Item Sub Type GUID	P2000 Item Sub Type GUID
Item GUID	Item GUID (unique for all P2000 sites, can be omitted)
Item Name	Name of Item (unique within P2000 Item Type for this P2000 Enterprise Site)
Version	Version Number for this Item
Parent GUID	Parent GUID of P2000 Item owning this item

Partition GUID	P2000 Partition GUID (ignored if system is non-partitioned)
Partition Name	P2000 Partition Name (ignored if system is non-partitioned)
IsPublic	Determines whether the item is public or not
QueryString	Query String

EditItem(string UserName, string SessionGuid, string xmlDoc)

This method is used to edit a P2000 item based on the specified xmlDoc. Please note that items can only be edited within the local P2000 system. In addition, not all item sub types support the “EditItem” method. Please refer to the item sub type’s metadata for more detailed information.

Parameters

Argument	Description
sUserName	P2000 username
sSessionGuid	Current P2000 session GUID
xmlDoc	String representation of an XML document defining the filter criteria

The string representation of the XML doc matches one of the schemas outlined below:

```

<P2000Request>
  <EditItem>
    <ItemFilter>
      <ItemSubTypeGuid>P2000 Item Sub Type GUID</ItemSubTypeGuid>
      <ItemGuid>Item GUID</ItemGuid>

      <ItemName>Item Name</ItemName>
      <PartitionGuid>Partition GUID, not supported in non-partitioned
                          system</PartitionGuid>
      <PartitionName>Partition Name, not supported in non-partitioned
                          system</PartitionName>
    </ItemFilter>

    <ItemName>Item Name</ItemName>

    <PartitionGuid>Partition GUID, not supported in non-partitioned
                          system</PartitionGuid>
    <PartitionName>Partition Name, not supported in non-partitioned
                          system</PartitionName>

    <Version>Version Number</VersionNumber>

    <PartitionGuid>Partition GUID, not supported in non-partitioned
                          system</PartitionGuid>
    <PartitionName>Partition Name, not supported in non-partitioned
                          system</PartitionName>
    <IsPublic>Public (1) or not (0), not supported in non-partitioned
                          system</IsPublic>

    <QueryString>Query String</QueryString>

    <DataFields>
      <DataField>
        <Name>Name of Data Field</Name>
        <Value>Value of Data Field</Value>
      <DataField>
    </DataFields>
  </EditItem>
</P2000Request>

```

The filter criteria identifying the item to be edited must meet the following rules:

1. Identify a single P2000 item.
2. The item sub type guid must always be provided.
3. Item Name based filters must provide either PartitionName or PartitionGuid, unless the system is not partitioned.

Return Value

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later.

DeleteItem(string UserName, string SessionGuid, string xmlDoc)

This method is used to delete P2000 items based on the specified xmlDoc. Please note that items can only be deleted within the local P2000 system. In addition not all item sub types support the “DeleteItem” method. Please refer to the item sub type’s metadata for more detailed information.

Parameters

Argument	Description
sUserName	P2000 username
sSessionGuid	Current P2000 session GUID
xmlDoc	String representation of an XML document defining the filter criteria

The string representation of the XML doc matches one of the schemas outlined below:

```
<P2000Request>
  <DeleteItem>
    <ItemSubTypeFilter>
      <ItemSubTypeGuid>P2000 Item Sub Type GUID</ItemSubTypeGuid>
      <ItemGuid>Item GUID</ItemGuid>

      <ItemName>Item Name</ItemName>
      <PartitionGuid>Partition GUID, not supported in non-partitioned
                          system</PartitionGuid>
      <PartitionName>Partition Name, not supported in non-partitioned
                          system</PartitionName>
    </ItemSubTypeFilter>
  </DeleteItem>
</P2000Request>
```

The filter criteria identifying the item to be edited must meet the following rules:

1. Item Sub Type GUID must always be provided.
2. Item Name based filters must provide either PartitionName or PartitionGuid, unless the system is not partitioned.

Return Value

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later.

History Transaction Interface

The history transaction interface supports two (2) different methods. The method outlined within the XAction Methods (page 87), allows the third party application to raise P2000 transaction messages and record entries within the P2000 transaction table.

However, third party applications are encouraged to use the function listed below, as this function does not only raise the P2000 transaction message and record the entry in the P2000 transaction table, but also generates the associated alarm messages and adjusts the status of the P2000 item, in accordance with the “History Processing Rules” defined for this P2000 item.

ProcessHistoryTransaction(string UserName, string SessionGuid, string xmlDoc)

Parameters

Argument	Description
sUserName	P2000 username
sSessionGuid	Current P2000 session GUID
xmlDoc	String representation of an XML document defining the filter criteria

The string representation of the XML doc matches one of the schemas outlined below:

```
<P2000Request>
  <HistoryMessage>
    <MessageGuid>Unique History Message GUID (optional) </MessageGuid>
    <SourceMessageGuid>Source Message GUID (optional)</SourceMessageGuid>

    <ItemSubTypeGuid>P2000 Item Sub Type GUID</ItemSubTypeGuid>
    <ItemGuid>Item GUID</ItemGuid>
    <HistoryType>History Type</HistoryType>
    <HistorySubType>History Sub Type</HistorySubType>

    <TimeStamp>String representation of local time stamp in W3C format
                    [YYYY-MM-DDThh:mm:ss+zh:mh</TimeStamp>

    <StatusGuid>New status of the item</StatusGuid>

    <Details>Details string to provide additional information</Details>
    <XmlAdditionalInfo>Xml string representation for additional
                    information</XmlAdditionalInfo>

    <ItemInformation>
      <PartitionName>Partition Name associated with the item</PartitionName>
      <IsPublic>Is Item public ?</IsPublic>
      <ItemName>Name of the Item</ItemName>
      <QueryString>Query String</QueryString>
      <TerminalName>Name of the Terminal</TerminalName>
      <DeviceName>Name of the Device</DeviceName>
    </ItemInformation>

    <EntityInformation>
      <EntityGuid>Guid of Entity</EntityGuid>
      <Name>Entity Name</Name>
      <FirstName> Entity First Name</FirstName>
      <MiddleName> EntityMiddle Name</MiddleName>
      <Company> Company Name</Company>
      <Division>Division Name</Division>
      <Department>Department Name</Department>
      <Team>Team Name</Team>
```

```

    <ID>Entity ID</ID>
  </EntityInformation>

  <BadgeInformation>
    <FacilityCode>Facility Code</FacilityCode>
    <BadgeNumber>BadgeNumber</BadgeNumber>
    <IssueLevel>IssueLevel</IssueLevel>
  </BadgeInformation>
</HistoryMessage>
</P2000Request>

```

P2000 will determine additional information required for the history message based on the provided ItemSubTypeGuid and ItemGuid. This additionally determined information includes:

Determined Information	Based On
HistoryGroup	History Type
DeviceName	Item Sub Type and Item GUID
TerminalName	Item Sub Type and Item GUID
Item Name	Item Sub Type and Item GUID
Name	EntityGuid
FirstName	EntityGuid
MiddleName	EntityGuid
Company	Entity GUID
Division	Entity GUID
Department	Entity GUID
Team	Entity GUID
ID	Entity GUID

EntityGUID and ItemGUID based information is only determined, if the information is not provided within the XML document. If the information is provided, the system will make not attempt to validate the derived entity information.

The additional information “AdditionalInfo” is the string representation of an XML document with the following format:

```

<AdditionalInfo>
  <DataFields>
    <DataField>
      <Name>Name of Data Field</Name>
      <Value>Value of Data Field</Value>
    <DataField>
      <DataField>
        <Name>Name of Data Field</Name>
        <Value>Value of Data Field</Value>
      </DataField>
    </DataField>
  </DataFields>
</AdditionalInfo>

```

The possible field names as well as their associated items will be determined within the item sub type definitions. P2000 will pass this information through to specialized consumers but NOT retain the associated information within the transaction database.

Return Value

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later.

Status Transaction Interface

The transaction interface allows the third party application to retrieve status information. As a P2000 item can only change its status based on a transaction, this interface does **not** support setting the status of a P2000 item directly.

GetItemStatusList(string UserName, string SessionGuid, string xmlDoc)

This method is used to return a list of 2000 item states based on the filter criteria provided within the XML document.

Parameters

Argument	Description
sUserName	P2000 username
sSessionGuid	Current P2000 session GUID
xmlDoc	String representation of an XML document defining the filter criteria

The string representation of the XML doc matches one of the schemas outlined below:

```
<P2000Request>
  <GetItemStatusList>
    <ItemFilter>
      <ItemSubTypeGuid>GUID of the Item Sub Type</ItemSubTypeGuid>
      <ItemTypeGuid>GUID of the Item Sub Type</ItemTypeGuid>
      <ItemGuid>GUID of the Item</ItemGuid>
      <ItemName>Name of Item</ItemName>

      <PartitionGuid>Partition GUID, not supported in non-partitioned
                        system</PartitionGuid>
      <PartitionName>Partition Name, not supported in non-partitioned
                        system</PartitionName>

      <ParentGuid>Parent GUID</ParentGuid>

      <EnterpriseSiteGuid>GUID of Enterprise Site</EnterpriseSiteGuid>
    </ItemFilter>
  </GetItemStatusList>
</P2000Request>
```

When providing a filter to the function, the following rules apply:

1. An ItemSubTypeGuid or an ItemTypeGuid has to be provided.
2. When providing an ItemName based filter, a Partition Name or Partition GUID must be provided.
3. A parent guid can be provided, when provided only direct children of this item will be returned (Guid.Empty = only root items are returned). If omitted all items meeting the other filter criteria will be provided.
4. A filter definition can contain either a PartitionName or a PartitionGuid.
5. If the enterprise site guid is omitted, then the function is executed for the local P2000 site.

Return Value

When successful the function returns a structure containing a string representing an XML document.

Member	Description
XmlDoc	String representation of the XML document

The XML document provides the following information:

```
<P2000Reply>
  <ItemStatusList>
    <ItemStatus>
      <ItemSubTypeGuid>GUID of the Item Sub Type</ItemSubTypeGuid>
      <ItemGuid>GUID of the Item</ItemGuid>
      <ItemName>Name of Item</ItemName>

      <PartitionGuid>Partition GUID</PartitionGuid>
      <PartitionName>Partition Name </PartitionName>
      <IsPublic>Non-public (0) or public (1)</IsPublic>

      <ParentGuid>Parent GUID</ParentGuid>

      <EnterpriseSiteGuid>GUID of Enterprise Site</EnterpriseSiteGuid>

      <ItemStatusValue>Item Status Value</ItemStatusValue>
      <ItemStatusText>Item Status Text</ItemStatusText>
      <ItemStatusGuid>Item Status Value GUID</ItemStatusGuid>
      <ItemStatusTimeStamp>Item Status TimeStamp when status was last
        changed (UTC) YYYY-MM-DDThh:mm:ssZ</ItemStatusTimeStamp>
    </ItemStatus>
  </ItemStatusList>
</P2000Reply>
```

Version

Available in P2000 V4.1 and later

Alarm Processing Interface

The P2000 Alarm Processing interface consists of the alarm functions in “Alarm Methods” on page 16 (especially the function “AlarmAction”) and the following “GetAlarmList” method. The purpose of the Alarm Processing Interface is to allow a third party application to implement a P2000 Alarm Monitor.

GetAlarmList(string UserName, string SessionGuid)

This method returns all currently active alarms (alarms that are not yet completed), provided that this alarm is visible to the specified user. The visibility of the alarm is determined using the P2000 Message Filtering rules.

Parameters

Argument	Description
sUserName	P2000 username
sSessionGuid	Current P2000 session GUID

Return Values

When successful the function returns a structure containing a string representing an XML document.

Member	Description
XmlDoc	String representation of the XML document

The Xml Document contains the following information:

```
<P2000Reply>
  <P2000Messages>
    <P2000Message> ..... </P2000Message>
    <P2000Message> ..... </P2000Message>
  </P2000Messages>
</P2000Reply>
```

Each P2000Message node represents an alarm message, as defined within the P2000 XML RMS API document for the P2000 version.

Command Interface

IssueCommand(string UserName, string SessionGuid, string xmlDoc)

This method is used to return a list of 2000 item states based on the filter criteria provided within the XML document.

Parameters

Argument	Description
sUserName	P2000 username
sSessionGuid	Current P2000 session GUID
xmlDoc	String representation of an XML document defining the filter criteria

The string representation of the XML doc matches one of the schemas outlined below:

```
<P2000Request>
  <IssueCommand>
    <ItemFilter>
      <ItemSubTypeGuid>GUID of the Item Sub Type</ItemSubTypeGuid>
      <ItemTypeGuid>GUID of the Item Sub Type</ItemTypeGuid>
      <ItemGuid>GUID of the Item</ItemGuid>
      <ItemName>Name of Item</ItemName>

      <PartitionGuid>Partition GUID, not supported in non-partitioned
                        system</PartitionGuid>
      <PartitionName>Partition Name, not supported in non-partitioned
                        system</PartitionName>

      <ParentGuid>Parent GUID</ParentGuid>

      <EnterpriseSiteGuid>GUID of Enterprise Site</EnterpriseSiteGuid>
    </ItemFilter>

    <CommandGuid>Command GUID</CommandGuid>

    <CommandParameters>
      <CommandParameter>
        <Name>Command Parameter Name</Name>
        <Value>Command Parameter Value</Value>
      </CommandParameter>
    </CommandParameters>
  </IssueCommand>
</P2000Request>
```

When providing a filter to the function, the following rules apply:

1. An ItemSubTypeGuid or an ItemTypeGuid has to be provided.

2. When providing an ItemName based filter, a Partition Name or Partition GUID must be provided.
3. A parent guid can be provided, when provided only direct children of this item will be returned (Guid.Empty = only root items are returned). If omitted all items meeting the other filter criteria will be provided.
4. A filter definition can contain either a PartitionName or a PartitionGuid.
5. If no enterprise site guid is provided, the function is executed against the local site.

The required command parameters are identified through the meta data associated with the identified item sub type and command guid.

Return Values

Returns TRUE (1) if successful, Fault Structure if failure.

Version

Available in P2000 V4.1 and later

Heartbeat Interface

HeartBeat(string UserName, string SessionGuid, string xmlDoc)

The heart beat interface allows the P2000 system to recognize that the third party system is still alive. The heart beat call initiate a P2000 Heartbeat Message which can be forwarded to a remote system.

The latter allows the third party application to detect that the P2000 system is fully operational. If P2000 does not receive a heart beat message within three (3) times the configured heart beat interval, P2000 raises an “Integration Server” alarm. This alarm can only be completed if the third party component comes back online.

Parameters

Argument	Description
sUserName	P2000 username
sSessionGuid	Current P2000 session GUID
xmlDoc	String representation of an XML document defining the filter criteria

The string representation of the XML doc matches one of the schemas outlined below:

```
<P2000Request>
  <HeartBeat>
    <ItemSubTypeGuid>Item Type GUID</ItemSubTypeGuid>
    <ItemName>Name of the Interface</ItemName>
    <ItemGuid>Guid of the Interface</ItemGuid>
    <TimeStamp>String representation of UTC time in W3C format
                      YYYY-MM-DDThh:mm:ss+zh:mh </TimeStamp>
  </HeartBeat>
</P2000Request>
```

Return Values

Returns a fault structure if unsuccessful, otherwise a structure with the following member:

Member	Description
CurrentUTCTime	String representation of UTC Time Stamp of last reported status change (W3C format)

Version

Available in P2000 V4.1 and later.

REVISION HISTORY

Date	Description
Nov-05-2007	Initial document based on P2000 V3.8 XML RPC (Rev Q) document.
Feb-11-2008	
Apr-30-2008	Fixed few typing errors and missing return values. Updated error code table.
May-05-2008	Added method 'ReadItem'.
May-23-2008	<ul style="list-style-type: none"> Modified the order of fields for results in legacy section. Results are returned in alphabetical order. Modified all reference to sSessionID to sSessionGuid. Added DoorUnlockAllSchedule and DoorUnlockAllScheduleByName methods.
May-30-2008	<ul style="list-style-type: none"> Remove SEntityType parameter. Add PanelGuid & PanelName in the Return Values structure for TerminalGetList & TerminalGetListByName methods.
Jun-20-2008	Update Alarm section within P2000 ECCC functionality.
Jun-23-2008	Update Alarm section within AlarmGetList and AlarmGetListByName.
Jun-30-2008	Changed <Alarms> to <P2000Messages> under GetAlarmList.
Sept 23-2008	Modified the Output Point Actions table to include Pulse.