



Resource
Data Management

Data Manager Web Services, Data Manager Enhanced Web Services & Intuitive TDB Web Services

User Guide
Revision 2.4a



R05XX/ PR0490-
EWS/ PR065X-TDB

Contents

Data Manager & miniDM Web Services, Data Manager & miniDM Enhanced Web Services & Intuitive TDB & Mini Intuitive TDB Web Services	3
Data Manager & miniDM Web Services Call & Functions	4
AlarmAccept (2017/03/24).....	5
AlarmAccept (2022/01/26).....	6
AlarmInhibit	7
GetAlarmList.....	8
GetGPTimerChannel	10
GetGPTimerChannels	13
GetLogDataInline	14
GetSlave	16
GetSlaveList	18
GetSyslog	19
GetTDBInfo	21
GetVersion	22
GetVirtuals	23
OverrideGPTimerChannel	25
ResetCPT	26
SetGPTimerChannel.....	27
SetSlave	30
Data Manager & miniDM Enhanced Web Services (PR0490-EWS) Call & Functions	34
GetConfig.....	35
GetCPT	37
GetDeviceCPT	39
GetDevices	40
GetGPTimerChannel	43
GetGPTimerChannels	46
GetItemVisibility	48
GetServiceAvailability	50
GetSystemLockout	51
SetCPT.....	52
SetDevice.....	55
SetDeviceAlias	57
SetDeviceCPT	58
SetDeviceName	59
SetDevices	60
SetGPTimerChannel.....	62
SetItemAliases.....	65
SetItemVisibility.....	67
SetSystemLockout.....	69
Intuitive & Mini Intuitive TDB (PR06XX-TDB) Web Services Call & Functions	70
CancelSlave.....	71
GetAlarmList.....	73
GetGPTimerChannel	75
GetGPTimerChannels	77
GetLogDataInline	78
GetLogItem	80
GetLogItemInLine	81
GetSlave	83
GetSyslog	85
GetTDBInfo	87
GetVersion	88
OverrideGPTimerChannel	89
SetGPTimerChannel.....	90
SetSlave	92
Testing	94
Time Format.....	94
Passwords	94
Disclaimer.....	95
Revision History	95

Data Manager & miniDM Web Services, Data Manager & miniDM Enhanced Web Services & Intuitive TDB & Mini Intuitive TDB Web Services

The Intuitive TDB, Mini Intuitive TDB and the Data Manager platforms have an in-built Web Services interface. The Data Manager has the additional functionality of Enhanced Web Services with the option to activate further functions* using part number PR0490-EWS.

The miniDM also has the Web Services feature but both the standard and enhanced are activated with part number PR0490-MD-EWS.

For activation and/ or enablement please consult the relevant device documentation or an RDM accounts manager.

This document details the specific functions for each platform offering examples of each. On both, the user has the ability to enable or disable the Web Services function within the configuration. Furthermore, encrypted authentication is used as a further security measure.

Note: Depending on the software version of the device used, a software upgrade may be required to obtain the Web Services feature or to get access to all the functions described in this document.

The devices use WSDL permitting SOAP messages over http with an XML serialisation. It is expected that the developer of any 3rd party interface utilising Web Services has prior knowledge of the service before attempting to implement the features outlined in this document. This knowledge cannot be provided by RDM.

Information regarding Web Services in general can be found from the following website:

<http://www.w3.org/TR/wsdl>

The three sections can be found below:

[Data Manager Web Services](#)

[Data Manager Enhanced Web Services](#)

[Intuitive Web Services](#)

*The Data Manager Enhanced Web Services can have the functions; GetCPT, SetCPT and GetConfig activated using part number PR0490-EWS.

Disclaimer

The specifications of the product detailed in this document may change without notice. RDM Ltd shall not be liable for errors or omissions, for incidental or consequential damages, directly or indirectly, in connection with the furnishing, performance or misuse of this product or document.

WARNING:

Please be aware that improper use of the Web Services functions can cause damage to the equipment. For example, if too many writes are attempted in a short space of time or if large amounts of data is sent at once this can flood the system. Furthermore, as with any device using flash memory, writes are to be restricted to less than 5 per day, any more could result in damaged flash memory and void the warranty on the device.

Data Manager & miniDM Web Services Call & Functions

The URL to get information on what is implemented on a Data Manager is;

<http://10.1.2.75/cgi-bin/cgi.cgi?WSDL>

This describes the functions currently available and the parameters they require. There is documentation in the service. Note the above is when connecting on Eth 0 (set to default 10.1.2.75), if you are viewing the Data Manager remotely you can use the IP address of Eth 1.

Outlined below are the functions available on the Data Manager platform;

Command	Description
AddDelivery	Not in use. Included for future development.
AlarmAccept *	Enables a remote system to accept alarms on the Data Manager,
AlarmInhibit	Inhibits alarms for the specified controllers.
GetAlarmList	Gets a copy of the current Data Manager Alarm log.
GetGPTimerChannel	Shows the current schedule operating in any single GP timer channel.
GetGPTimerChannels	Shows the current schedule operating in multiple GP timer channels.
GetLogDataInline	Get a block of historical data for a given controller listed in Device List.
GetSlave	Returns detailed information for the specified controller e.g. Input, Output Values etc
GetSlaveList	Returns a list of the controllers currently logged on to the Data Manager.
GetSyslog	Get a copy of the current System log.
GetTDBInfo	Get information relating to any TDB program running in the Data Manager e.g. description, name, last modified date, number of blocks used etc.
GetVersion	Find out the application Software Version running in the Data Manager.
GetVirtuals	Gets current Virtual values currently being used in TDB programs
OverrideGPTimerChannel	Sets run-on for a GP timer channel to the given period
ResetCPT	Enables a remote system to reset a CPT value for a given device.
SetGPTimerChannel	Edit/set a schedule in a specified GP timer channel.
SetSlave	Sets the given controller parameters to the values specified
SetVirtuals	Sets current Virtual values currently being used in TDB programs

* **Note:** In DMTouch software version 4.1.1 and above Web Services 2022/01/26 is available and will give a different response for the AlarmAccept command. More information for this command can be found on page 5 and 6.

Detailed descriptions and some basic examples are outlined in the subsequent sections.

Some of the above features require the user to authenticate the webservice request with the Data Manager to make a connection. This username and password can be added through the Data Managers webpage's i.e. it is the same username/password which is used to access the service menus on the Data Manager. Note the password is encoded using SHA-1 hash, the username is plain text. Please see the [password section](#) for more details.

There is an option in the Data Manager to turn Web Services authentication off. This is found on the "Site Setup" page of the Data Manager and is termed "Authentication on Web Service", un-tick the box to disable authentication.

Anything that supports Web Services can be used to access the Data Manager interface.

Disclaimer

The specifications of the product detailed in this document may change without notice. RDM Ltd shall not be liable for errors or omissions, for incidental or consequential damages, directly or indirectly, in connection with the furnishing, performance or misuse of this product or document.

WARNING:

Please be aware that improper use of the Web Services functions can cause damage to the equipment. For example, if too many writes are attempted in a short space of time or if large amounts of data is sent at once this can flood the system. Furthermore, as with any device using flash memory, writes are to be restricted to less than 5 per day, any more could result in damaged flash memory and void the warranty on the device.

AlarmAccept (2017/03/24)

Enables a remote system to accept alarms on the Data Manager.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>?</ns:UserName>
      <ns>Password>?</ns>Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:AlarmAccept>
      <ns:Index>?</ns:Index>
    </ns:AlarmAccept>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Username	Text string of the user name to access device.
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.
Index	Positive integer of the unique alarm ID ranging from 1 – X, where X is only bound by the number of alarm entries the DM can hold. i.e. storage space.

Example

Accept alarm serial Number 37 using user name/ password, install/ 1234;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns>Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns>Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:AlarmAccept>
      <ns:Index>37</ns:Index>
    </ns:AlarmAccept>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
AlarmAcceptResult	Returns a boolean value of either 'true' or 'false' depending if the action was successful or not.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <AlarmAcceptResponse xmlns="http://www.resourcedm.com/RDMServices/2012/06/18/">
      <AlarmAcceptResult>true</AlarmAcceptResult>
    </AlarmAcceptResponse>
  </soap:Body>
</soap:Envelope>
```

AlarmAccept (2022/01/26)

Enables a remote system to accept alarms on the Data Manager.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2022/01/26/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>?</ns:UserName>
      <ns>Password>?</ns>Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:AlarmAccept>
      <ns:Index>?</ns:Index>
    </ns:AlarmAccept>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Username	Text string of the user name to access device.
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.
Index	Positive integer of the unique alarm ID ranging from 1 – X, where X is only bound by the number of alarm entries the DM can hold. i.e. storage space.

Example

Accept alarm serial Number 37 using user name/ password, install/ 1234;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2022/01/26/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns>Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns>Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:AlarmAccept>
      <ns:Index>37</ns:Index>
    </ns:AlarmAccept>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
AlarmAcceptResult	Returns a value of either 'Done' if the alarm has been accepted, 'Already' if the alarm has already been accepted, 'NotFound' if the serial number of the alarm is not in the log and 'Problem' if there is a problem

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <AlarmAcceptResponse xmlns="http://www.resourcedm.com/RDMServices/2022/01/26/">
      <AlarmAcceptResult>Done</AlarmAcceptResult>
    </AlarmAcceptResponse>
  </soap:Body>
</soap:Envelope>
```

AlarmInhibit

Inhibits alarms for the specified controllers.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName?</ns:UserName>
      <ns:Password?</ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:AlarmInhibit>
      <ns:Type?</ns:Type>
      <ns:Controller?</ns:Controller>
    </ns:AlarmInhibit>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Username	Text string of the user's name to access device.
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.
Type	Text sting of the inhibit type to be used. Can be one of either; 'Cancel', 'Short', 'Long' or 'Online'.
Controller	Text string of controller to be inhibited.

Example

Place a short inhibit on to controller '031';

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns:Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:AlarmInhibit>
      <ns:Type>Short</ns:Type>
      <ns:Controller>031</ns:Controller>
    </ns:AlarmInhibit>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
AlarmInhibitResult	Returns a boolean value of either 'true' or 'false' depending if the action was successful or not.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <AlarmInhibitResponse xmlns="http://www.resourcedm.com/RDMServices/2012/06/18/">
      <AlarmInhibitResult>true</AlarmInhibitResult>
    </AlarmInhibitResponse>
  </soap:Body>
</soap:Envelope>
```

GetAlarmList

Obtains an alarm list stored within the device bounded by stated parameters.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetAlarmList>
      <!--Optional:-->
      <ns:Number?></ns:Number>
      <!--Optional:-->
      <ns:StartTime?></ns:StartTime>
      <!--Optional:-->
      <ns:Controller?></ns:Controller>
      <!--Optional:-->
      <ns:EndTime?></ns:EndTime>
    </ns:GetAlarmList>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Number	A positive integer ranging from 1 – X. where X is only bound by the number of alarms the device can hold. i.e., device storage. This is the number of alarm entries the function will extract.
Start Time	Represented in the ISO8601 format this is the time and date for which the alarm list extracted, will start from. Ie. Only lists the alarms which occurred before this time.
Controller	Text string of a controller ID.
End Time	Represented in the ISO8601 format this is the time and date for which the alarm list extracted, will end. Ie. Only lists the alarms which occurred after this time.
*Optional	Where 'optional' is described above the field and if that field is not required, remove it.

Example

Obtain the last two alarms for controller 031.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetAlarmList>
      <ns:Number>2</ns:Number>
      <ns:Controller>031</ns:Controller>
    </ns:GetAlarmList>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
Alarm – Serial	Positive integer of the unique alarm ID ranging from 1 – X, where X is only bound by the number of alarm entries the DM can hold. i.e., storage space.
Alarm – Text	Text string of the alarm alias.
Alarm – Occurred	Represented in the ISO8601 format this is the time and date of when the alarm occurred.
Alarm – Accepted	Represented in the ISO8601 format this is the time and date of when the alarm was accepted.
Alarm – AcceptedBy	Text string of the user ID that 'accepted' the alarm.
Alarm – Cleared	Represented in the ISO8601 format this is the time and date of when the alarm cleared.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetAlarmListResponse xmlns="http://www.resourcedm.com/RDMServices/2012/06/18/">
      <GetAlarmListResult>
        <Alarm>
          <Serial>38</Serial>
          <Text>Alarm Inhibit</Text>
          <Occurred>2016-07-23T08:39:57+01:00</Occurred>
          <Accepted>2016-07-23T08:41:00+01:00</Accepted>
          <AcceptedBy>install</AcceptedBy>
          <Cleared>2016-07-23T08:40:53+01:00</Cleared>
        </Alarm>
        <Alarm>
          <Serial>37</Serial>
          <Text>Case over temperature</Text>
          <Occurred>2016-07-23T08:30:56+01:00</Occurred>
          <Accepted>2016-07-23T08:33:52+01:00</Accepted>
          <AcceptedBy>install</AcceptedBy>
          <Cleared>2016-07-23T08:32:17+01:00</Cleared>
        </Alarm>
      </GetAlarmListResult>
    </GetAlarmListResponse>
  </soap:Body>
</soap:Envelope>
```

GetGPTimerChannel

Returns the current schedule of the specified GP Timer Channel. The Data Manager has 40 available channels.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetGPTimerChannel>
      <ns:Index>?</ns:Index>
    </ns:GetGPTimerChannel>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Index	A positive integer ranging between; 1 and 100. This specifies the GP Timer channel the function will interrogate.

Example

Requesting the details of GP Timer channel 1;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetGPTimerChannel>
      <ns:Index>1</ns:Index>
    </ns:GetGPTimerChannel>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
Index	A positive integer of the GP Channel Number between 1 and 100.
Type	Text string of the type, the GP Channel is set to; "Master" or "Slave".
Name	Text string of the GP channel's description.
OutputType	Text string of the output type used in the GP Channel. Will be one of; 'Case', 'General', 'Local Relay' or 'Transmit'.
OutputMask	Text string of the output mask used in the GP Channel.
OutputIndex	A positive integer of the output channel used in the GP Channel. Ranging from 1 - X, where X is bound by the number of outputs a specific device has.
InputType	Text string of the input type used in the GP Channel. Will be one of; 'Unused', 'Force On', 'Force Off', 'And' or 'Toggle'.
Input Controller	Text string of the input device.
InputIndex	A positive integer defining the 'input device's' input channel number.
MasterChannel	If GP Timer channel is of type 'Master', this will be returned as a '0'. Else, if set to a 'Slave', the slave's master channel will be returned i.e. a positive integer between 1 and 100.
Invert	Boolean of if the GP channel is set to invert or not. Will be either; 'true' or 'false'.
Overridable	Boolean of if the GP channel is set to allow overrides or not. Will be either; 'true' or 'false'.
GPEvent - Type	A text string of the 'GP Event's' Type; "Unused", "Day", "Week", "Year", "Once" or "Slave". If channel is set as a 'slave', this will return 'Slave'.
GPEvent - DayMask	A positive integer between 1 and 64; 1: Sunday 2: Monday 4: Tuesday 8: Wednesday 16: Thursday 32: Friday

	64: Saturday If unused, will return 0.
GPEvent - Day	A positive integer between 1 and 31. Represents a date. If unused will return 0.
GPEvent - Month	A positive integer between 1 and 12. Represents a month. If unused will return 0.
GPEvent - Year	A positive integer between 1 and 9999. Represents a year. If unused will return 0.
GPEvent - OnTime1	A positive or negative integer between -720 and +1440. Time in minutes. If unused will return 0.
GPEvent - OffTime1	A positive or negative integer between -720 and +1440. Time in minutes. If unused will return 0.
GPEvent - OnTime2	A positive or negative integer between -720 and +1440. Time in minutes. If unused will return 0.
GPEvent - OffTime2	A positive or negative integer between -720 and +1440. Time in minutes. If unused will return 0.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetGPTimerChannelResponse xmlns="http://www.resourcedm.com/RDMServices/2012/06/18/">
      <GetGPTimerChannelResult>
        <Index>1</Index>
        <Type>Master</Type>
        <Name>Trading Times</Name>
        <OutputType>Case</OutputType>
        <OutputMask>??</OutputMask>
        <OutputIndex>0</OutputIndex>
        <InputType>Force On</InputType>
        <InputController>002</InputController>
        <InputIndex>0</InputIndex>
        <MasterChannel>0</MasterChannel>
        <Invert>>false</Invert>
        <Overridable>>true</Overridable>
        <Events>
          <GPEvent>
            <Type>Week</Type>
            <DayMask>2</DayMask>
            <Day>0</Day>
            <Month>0</Month>
            <Year>0</Year>
            <OnTime1>480</OnTime1>
            <OffTime1>750</OffTime1>
            <OnTime2>810</OnTime2>
            <OffTime2>1200</OffTime2>
          </GPEvent>
          <GPEvent>
            <Type>Week</Type>
            <DayMask>4</DayMask>
            <Day>0</Day>
            <Month>0</Month>
            <Year>0</Year>
            <OnTime1>480</OnTime1>
            <OffTime1>750</OffTime1>
            <OnTime2>810</OnTime2>
            <OffTime2>1200</OffTime2>
          </GPEvent>
          <GPEvent>
            <Type>Week</Type>
            <DayMask>8</DayMask>
            <Day>0</Day>
            <Month>0</Month>
            <Year>0</Year>
            <OnTime1>480</OnTime1>
            <OffTime1>750</OffTime1>
            <OnTime2>810</OnTime2>
            <OffTime2>1200</OffTime2>
          </GPEvent>
          <GPEvent>
            <Type>Week</Type>
            <DayMask>16</DayMask>
            <Day>0</Day>
            <Month>0</Month>
          </GPEvent>
        </Events>
      </GetGPTimerChannelResult>
    </GetGPTimerChannelResponse>
  </soap:Body>
</soap:Envelope>
```

```
<Year>0</Year>
<OnTime1>480</OnTime1>
<OffTime1>750</OffTime1>
<OnTime2>810</OnTime2>
<OffTime2>1200</OffTime2>
</GPEvent>
</Events>
</GetGPTimerChannelResult>
</GetGPTimerChannelResponse>
</soap:Body>
</soap:Envelope>
```

GetGPTimerChannels

Returns the current statuses of all GP Timer Channels.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2022/01/26/">
  <soapenv:Header>
  </soapenv:Header>
  <soapenv:Body>
    <ns:GetGPTimerChannels/>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
N/A	

Example

Request state of all GP Timer Channels. Example as above.

Returns

The function will return;

Fields	Details
Index	A positive integer of the GP Channel Number between 1 and 100.
Name	A text string of the GP channel's description.
Status	A text string of the GP channel's current state; returns either 'true' or 'false'.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetGPTimerChannelsResponse xmlns="http://www.resourcedm.com/RDMServices/2012/06/18/">
      <GetGPTimerChannelsResult>
        <GPChannel>
          <Index>1</Index>
          <Name>Trading Times</Name>
          <Status>>false</Status>
        </GPChannel>
        <GPChannel>
          <Index>2</Index>
          <Name>Cafe Lights</Name>
          <Status>>false</Status>
        </GPChannel>
        <GPChannel>
          <Index>3</Index>
          <Name>Cabinet Lights</Name>
          <Status>>false</Status>
        </GPChannel>
        :
        :
        :
        <GPChannel>
          <Index>40</Index>
          <Name>Global GP Channel 8</Name>
          <Status>>false</Status>
        </GPChannel>
      </GetGPTimerChannelsResult>
    </GetGPTimerChannelsResponse>
  </soap:Body>
</soap:Envelope>
```

GetLogDataInline

Get a block of historical data for a given controller listed in Device List.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetLogDataInline>
      <ns:ResponseType?></ns:ResponseType>
      <ns:Controller?></ns:Controller>
      <ns:Step?></ns:Step>
      <ns:Start?></ns:Start>
      <ns:End?></ns:End>
    </ns:GetLogDataInline>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
ResponseType	Define the type the data the function will return. Can be either "Csv" or "Xml"
Controller	Text string of controller ID
Step	Positive integer defining the frequency of extracted points in seconds. Range from 15 – X.
Start	The time in ISO8601 format the block of data will begin from
End	The time in ISO8601 format the block of data will end at.

Note: When using the time format the seconds must be in increments of 15 (e.g 00, 15, 30 & 45)

Example

Request log of values for controller 'WPR007' between 06:00 and 07:00 GMT on 23rd July 2016 with 15-minute intervals in Xml format;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetLogDataInline>
      <ns:ResponseType>Xml</ns:ResponseType>
      <ns:Controller>WPR007</ns:Controller>
      <ns:Step>900</ns:Step>
      <ns:Start>2016-07-23T06:00:00Z</ns:Start>
      <ns:End>2016-07-23T08:00:00Z</ns:End>
    </ns:GetLogDataInline>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
Controller	Confirms controller ID.
Step	Confirms requested step of request.
Start	Confirms requested start time in the ISO8601 format of request.
End	Confirms requested end time in the ISO8601 format of request.
LogData	Data in the format requested.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetLogDataResponse xmlns="http://www.resourcedm.com/RDMServices/2012/06/18/">
      <GetLogDataResult>
        <Controller>WPR007</Controller>
        <Step>900</Step>
```

```
<Start>2016-07-23T07:00:00+01:00</Start>
<End>2016-07-23T08:00:00+01:00</End>
<LogData><![CDATA[<?xml version="1.0" encoding="UTF-8" ?>
<Data>
<Fields>
<Field>Probe Temp</Field>
<Field>Control State</Field>
<Field>TPI</Field>
</Fields>
<Entries>
<Entry>
<Time>2016-07-23T07:00:00+01:00</Time>
<Values>
<Value>25.7</Value>
<Value>Normal</Value>
<Value>1.0</Value>
</Values>
</Entry>
<Entry>
<Time>2016-07-23T07:15:00+01:00</Time>
<Values>
<Value>25.7</Value>
<Value>Normal</Value>
<Value>1.0</Value>
</Values>
</Entry>
<Entry>
<Time>2016-07-23T07:30:00+01:00</Time>
<Values>
<Value>25.7</Value>
<Value>Normal</Value>
<Value>1.0</Value>
</Values>
</Entry>
<Entry>
<Time>2016-07-23T07:45:00+01:00</Time>
<Values>
<Value>25.7</Value>
<Value>Normal</Value>
<Value>1.0</Value>
</Values>
</Entry>
<Entry>
<Time>2016-07-23T08:00:00+01:00</Time>
<Values>
<Value>25.6</Value>
<Value>Normal</Value>
<Value>1.0</Value>
</Values>
</Entry>
</Entries>
</Data>]]></LogData>
</GetLogDataResult>
</GetLogDataResponse>
</soap:Body>
</soap:Envelope>
```

GetSlave

Returns detailed information for the specified controller e.g., Input, Output and Parameter Values.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetSlave>
      <ns:Controller?></ns:Controller>
    </ns:GetSlave>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Controller	Text string of controller ID

Example

Obtain details of device '002';

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetSlave>
      <ns:Controller>002</ns:Controller>
    </ns:GetSlave>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
Description	Text String of the device's description alias
Network – Status	Text string of the device's current status. Will be either; 'Offline' or 'Online'.
Network – Time	The time in ISO8601 format the device has been 'Online' or 'Offline' from.
Item – Class	Text string of the item's type. Will be either; 'Input', 'Output', 'Parameter' or 'State'.
Item – Name	Text string of the item's alias.
Item – Value	Text string of the item's current value.
Item – Units	Text string of the item's units
Detail – Type	Text string of the specific Detail's type. Can be either; 'Numeric', 'String', 'Time' or 'Date'.
Detail – String	Text string of the specific Detail's possible values that can be chosen.
Detail – Min	Text string of the specific Detail's minimum value.
Detail – Max	Text string of the specific Detail's maximum value.
Detail – Step	Text string of the specific Detail's step.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetSlaveResponse xmlns="http://www.resourcedm.com/RDMServices/2012/06/18/">
      <GetSlaveResult>
        <Description>Digital Input 2</Description>
        <Network>
          <Status>Online</Status>
          <Time>2016-07-21T11:43:53+01:00</Time>
        </Network>
        <Items>
          <Item>
            <Class>Input</Class>
          </Item>
        </Items>
      </GetSlaveResult>
    </GetSlaveResponse>
  </soap:Body>
</soap:Envelope>
```

```
<Name>Alarm Input</Name>
<Value>Off</Value>
<Units/>
</Item>
<Item>
  <Class>Parameter</Class>
  <Name>Active State</Name>
  <Value>Short</Value>
  <Units/>
  <Detail>
    <Type>String</Type>
    <Strings>
      <String>Open</String>
      <String>Short</String>
    </Strings>
  </Detail>
</Item>
<Item>
  <Class>Parameter</Class>
  <Name>Alarm delay</Name>
  <Value>5</Value>
  <Units>mins</Units>
  <Detail>
    <Type>Numeric</Type>
    <Min>0</Min>
    <Max>999</Max>
    <Step>1</Step>
  </Detail>
</Item>
<Item>
  <Class>State</Class>
  <Name>Control State</Name>
  <Value>OK</Value>
  <Units/>
</Item>
</Items>
</GetSlaveResult>
</GetSlaveResponse>
</soap:Body>
</soap:Envelope>
```

GetSlaveList

Returns a list of the controllers currently logged on to the Data Manager.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetSlaveList/>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
N/A	

Example

Request list of all devices logged on to the Data Manager. Example as above.

Returns

The function will return;

Fields	Details
Slave - Name	Text string of device's name.
Slave - Description	Text string of device's description alias.
Slave - Value	Text string of device's current value.
Slave - State	Text string of device's current state. Will be one of either; 'Normal', 'Alarm', 'Defrost', 'Off', 'Inhibit', 'Pending' or 'Offline'.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetSlaveListResponse xmlns="http://www.resourcedm.com/RDMServices/2012/06/18/">
      <GetSlaveListResult>
        <Slave>
          <Name>HP00-1</Name>
          <Description>PackCondS</Description>
          <Value>3.3</Value>
          <State>Normal</State>
        </Slave>
        <Slave>
          <Name>HR00-0</Name>
          <Description>Coldroom High Temp</Description>
          <Value>4.3</Value>
          <State>Normal</State>
        </Slave>
        <Slave>
          <Name>HT00-4</Name>
          <Description>Mobile Controller (HT)</Description>
          <Value>1.2</Value>
          <State>Normal</State>
        </Slave>
        :
        :
        <Slave>
          <Name>WPR007</Name>
          <Description>Wireless Probe</Description>
          <Value>26.2</Value>
          <State>Normal</State>
        </Slave>
      </GetSlaveListResult>
    </GetSlaveListResponse>
  </soap:Body>
</soap:Envelope>
```

GetSyslog

Returns a copy of the current system log, defining the number of entries returned in the function.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName?</ns:UserName>
      <ns:Password?</ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:GetSyslog>
      <!--Optional:-->
      <ns:Number?</ns:Number>
    </ns:GetSyslog>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Username	Text string of the user name to access device
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.
Number	Positive Integer defining number of system log entries to be returned. Latest Entry first. As this is optional, removing the number field will default the number of entries to 250.
*Optional	Where 'optional' is described above the field and if that field is not required, remove it.

Example

Return 2 system log entries, using the username/ password – install / 1234;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns:Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:GetSyslog>
      <ns:Number>2</ns:Number>
    </ns:GetSyslog>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
Event – Time	Time of entry in the ISO8601 format .
Event - Text	Text string of the system log entry.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetSyslogResponse xmlns="http://www.resourcedm.com/RDMServices/2012/06/18/">
      <GetSyslogResult>
        <Event>
```

```
<Time>2016-07-23T10:26:25+01:00</Time>
  <Text>'3' Logged on from 10.1.0.81</Text>
</Event>
<Event>
  <Time>2016-07-23T09:20:42+01:00</Time>
  <Text>GP timer channel 1 settings changed</Text>
</Event>
</GetSyslogResult>
</GetSyslogResponse>
</soap:Body>
</soap:Envelope>
```

GetTDBInfo

Get information relating to any TDB program running in the Data Manager e.g., description, name, last modified date, number of blocks used etc.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetTDBInfo/>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
N/A	

Example

Request details of all TDB's running on the Data Manager. Example as above.

Returns

The function will return;

Fields	Details
Description	Text string of the TDB's description.
SlaveName	Text string of the TDB's slave name.
BlockCount	A positive integer of the number of blocks the TDB uses.
ModificationDate	The last time the TDB was modified in the ISO8601 format .
FileSize	Positive integer detailing the space taken by the TDB on the device. Note: not file size when downloaded.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetTDBInfoResponse xmlns="http://www.resourcedm.com/RDMServices/2012/06/18/">
      <GetTDBInfoResult>
        <TDBProgram>
          <TDBProgram>
            <Description>PID Control</Description>
            <SlaveName>025</SlaveName>
            <BlockCount>335</BlockCount>
            <FileName>PID testing.tdb</FileName>
            <ModificationDate>2016-04-01T10:14:39+01:00</ModificationDate>
            <FileSize>66339</FileSize>
          </TDBProgram>
        </TDBProgram>
        <TDBProgram>
          <Description>Condenser TD Probes</Description>
          <SlaveName>027</SlaveName>
          <BlockCount>9</BlockCount>
          <FileName>CondenserTD.tdb</FileName>
          <ModificationDate>2016-04-01T10:14:39+01:00</ModificationDate>
          <FileSize>3075</FileSize>
        </TDBProgram>
        <TDBProgram>
          <Description>Energy Monitoring</Description>
          <SlaveName>000002</SlaveName>
          <BlockCount>95</BlockCount>
          <FileName>Energy Monitoring.tdb</FileName>
          <ModificationDate>2016-04-01T10:14:39+01:00</ModificationDate>
          <FileSize>19507</FileSize>
        </TDBProgram>
      </GetTDBInfoResult>
    </GetTDBInfoResponse>
  </soap:Body>
</soap:Envelope>
```

GetVersion

Returns the application software version running on the Data Manager.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetVersion/>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
N/A	

Example

Request application software version of Data Manager's. Example as above.

Returns

The function will return;

Fields	Details
ApplicationVersion	Text string of Data Manager's application software version.
CgiVersion	Text string of Data Manager's Cgi software version.
SiteName	Text string of Data Manager's Site name.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetVersionResponse xmlns="http://www.resourcedm.com/RDMServices/2012/06/18/">
      <GetVersionResult>
        <ApplicationVersion>Data Manager Touch V2.3.2</ApplicationVersion>
        <CgiVersion>Cgi V2.3.2</CgiVersion>
        <SiteName>RDM Data Manager</SiteName>
      </GetVersionResult>
    </GetVersionResponse>
  </soap:Body>
</soap:Envelope>
```

GetVirtuals

Returns the current values of the requested 'virtual' points used in a TDB program.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>?</ns:UserName>
      <ns>Password>?</ns>Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:GetVirtuals>
      <!--1 or more repetitions!-->
      <ns:Name>?</ns:Name>
    </ns:GetVirtuals>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Username	Text string of the user name to access device
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.
Name	Text string of the device's ID/ name.

Example

Obtain current values from three virtuals; Value1, Value2 and Value3;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns>Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns>Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:GetVirtuals>
      <ns:Name>Value1</ns:Name>
      <ns:Name>Value2</ns:Name>
      <ns:Name>Value3</ns:Name>
    </ns:GetVirtuals>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
Virtual - Name	Text string of the virtual's alias.
Virtual - Type	Text string of the virtual's type. Will be one of; 'Digital', 'Analogue', 'String' or 'Unknown'
Virtual - Value	Depends on virtual's type; for 'Digital' it will return a '0' or a '1'. A signed integer. A text strings. If 'Unknown' it will return a '0'.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetVirtualsResponse xmlns="http://www.resourcedm.com/RDMServices/2012/06/18/">
      <GetVirtualsResult>
```

```
<Virtual>
  <Name>Value1 </Name>
  <Type>Analogue</Type>
  <Value>6</Value>
</Virtual>
<Virtual>
  <Name>Value2</Name>
  <Type>Analogue</Type>
  <Value>3</Value>
</Virtual>
<Virtual>
  <Name>Value3</Name>
  <Type>Digital</Type>
  <Value>1</Value>
</Virtual>
</GetVirtualsResult>
</GetVirtualsResponse>
</soap:Body>
</soap:Envelope>
```

OverrideGPTimerChannel

Sets the run-on for a GP timer channel to the given period.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>?</ns:UserName>
      <ns>Password>?</ns>Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:OverrideGPTimerChannel>
      <ns:Index>?</ns:Index>
      <ns:Duration>?</ns:Duration>
    </ns:OverrideGPTimerChannel>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Username	Text string of the user name to access device
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.
Index	A positive integer of the GP Channel Number between 1 and 100.
Duration	A positive integer of the number of minutes to override the channel.

Example

Override the GP channel number 1 for 10 minutes;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns>Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns>Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:OverrideGPTimerChannel>
      <ns:Index>1</ns:Index>
      <ns:Duration>10</ns:Duration>
    </ns:OverrideGPTimerChannel>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
OverrideGPTimerChannelResult	Returns a boolean value of either 'true' or 'false' depending if the action was successful or not.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <OverrideGPTimerChannelResponse xmlns="http://www.resourcedm.com/RDMServices/2012/06/18/">
      <OverrideGPTimerChannelResult>true</OverrideGPTimerChannelResult>
    </OverrideGPTimerChannelResponse>
  </soap:Body>
</soap:Envelope>
```

ResetCPT

Enables a remote system to reset a CPT value for a given device.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName?</ns:UserName>
      <ns:Password?</ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:ResetCPT>
      <ns:Controller?</ns:Controller>
    </ns:ResetCPT>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Username	Text string of the user name to access device
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.
Controller	Text string of the controller's ID/ name.

Example

Reset the CPT value on device 'HT00-2' using the username/ password install/ 1234;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns:Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:ResetCPT>
      <ns:Controller>HT00-2</ns:Controller>
    </ns:ResetCPT>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
ResetCPTResult	Returns a boolean value of either 'true' or 'false' depending if the action was successful or not.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ResetCPTResponse xmlns="http://www.resourcedm.com/RDMServices/2012/06/18/">
      <ResetCPTResult>true</ResetCPTResult>
    </ResetCPTResponse>
  </soap:Body>
</soap:Envelope>
```

SetGPTimerChannel

Edit and or set a specific GP Timer channel.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName?</ns:UserName>
      <ns:Password?</ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetGPTimerChannel>
      <ns:Index?</ns:Index>
      <ns:Type?</ns:Type>
      <ns:Name?</ns:Name>
      <ns:OutputType?</ns:OutputType>
      <ns:OutputMask?</ns:OutputMask>
      <ns:OutputIndex?</ns:OutputIndex>
      <ns:InputType?</ns:InputType>
      <ns:InputController?</ns:InputController>
      <ns:InputIndex?</ns:InputIndex>
      <ns:MasterChannel?</ns:MasterChannel>
      <ns:Invert?</ns:Invert>
      <ns:Overridable?</ns:Overridable>
      <!--Optional:-->
      <ns:Events>
        <!--Zero or more repetitions:-->
        <ns:GPEvent>
          <ns:Type?</ns:Type>
          <ns:DayMask?</ns:DayMask>
          <ns:Day?</ns:Day>
          <ns:Month?</ns:Month>
          <ns:Year?</ns:Year>
          <ns:OnTime1?</ns:OnTime1>
          <ns:OffTime1?</ns:OffTime1>
          <ns:OnTime2?</ns:OnTime2>
          <ns:OffTime2?</ns:OffTime2>
        </ns:GPEvent>
      </ns:Events>
    </ns:SetGPTimerChannel>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Username	Text string of the user name to access device
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.
Index	A positive integer of the GP Channel Number between 1 and 100.
Type	Text string of the type, the GP Channel is to be; "Master" or "Slave".
Name	Text string of the GP channel's description.
OutputType	Text string of the output type used in the GP Channel. Will be one of; 'Case', 'General', 'Local Relay' or 'Transmit'.
OutputMask	Text string of the output mask used in the GP Channel.
OutputIndex	A positive integer of the output channel used in the GP Channel. Ranging from 1 – X, where X is bound by the number of outputs a specific device has.
InputType	Text string of the input type used in the GP Channel. Will be one of; 'Unused', 'Force On', 'Force Off', 'And' or 'Toggle'.
Input Controller	Text string of the input device.
InputIndex	A positive integer defining the 'input device's' input channel number.
MasterChannel	If the GP Timer channel is to be of type 'Master', set to '0'. Else, if it is set to a 'Slave', the slave's master channel is to be entered. To be a positive integer between 1 and 100.
Invert	Boolean of if the GP channel is set to invert or not. Can be either; 'true' or 'false'.

Overridable	Boolean of if the GP channel is set to allow overrides or not. Can be either; 'true' or 'false'.
GPEvent - Type	A text string of the 'GP Event's' Type; "Unused", "Day", "Week", "Year", "Once" or "Slave". If channel is to be set as a type 'slave', input 'Slave'.
GPEvent - DayMask	A positive integer between 1 and 64; 1: Sunday 2: Monday 4: Tuesday 8: Wednesday 16: Thursday 32: Friday 64: Saturday If unused, enter '0'.
GPEvent - Day	A positive integer between 1 and 31. Represents a date. If unused enter '0'.
GPEvent - Month	A positive integer between 1 and 12. Represents a month. If unused enter '0'.
GPEvent - Year	A positive integer between 1 and 9999. Represents a year. If unused enter '0'.
GPEvent - OnTime1	A positive or negative integer between -720 and +1440. Time in minutes. If unused enter '0'.
GPEvent - OffTime1	A positive or negative integer between -720 and +1440. Time in minutes If unused enter '0'.
GPEvent - OnTime2	A positive or negative integer between -720 and +1440. Time in minutes If unused enter '0'.
GPEvent - OffTime2	A positive or negative integer between -720 and +1440. Time in minutes. If unused enter '0'.

Example

Set GP timer channel 14 to have a daily 'on' period of between 09:00 – 10:00 and 13:00 – 15:00. Setting it to master and controlling the local relay;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns>Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns>Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetGPTimerChannel>
      <ns:Index>14</ns:Index>
      <ns:Type>Master</ns:Type>
      <ns:Name>GP Timer Channel 14</ns:Name>
      <ns:OutputType>Local Relay</ns:OutputType>
      <ns:OutputMask>0</ns:OutputMask>
      <ns:OutputIndex>4</ns:OutputIndex>
      <ns:InputType>Unused</ns:InputType>
      <ns:InputController>0</ns:InputController>
      <ns:InputIndex>0</ns:InputIndex>
      <ns:MasterChannel>0</ns:MasterChannel>
      <ns:Invert>false</ns:Invert>
      <ns:Overridable>true</ns:Overridable>
      <ns:Events>
        <ns:GPEvent>
          <Type>Day</Type>
          <DayMask>0</DayMask>
          <Day>0</Day>
          <Month>0</Month>
          <Year>0</Year>
          <OnTime1>540</OnTime1>
          <OffTime1>600</OffTime1>
          <OnTime2>780</OnTime2>
          <OffTime2>900</OffTime2>
        </ns:GPEvent>
      </ns:Events>
    </ns:SetGPTimerChannel>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
SetGPTimerChannelResult	Returns a boolean value of either 'true' or 'false' depending if the action was successful or not.

SetSlave

Sets the given controller parameters to the values specified.

Note: If setting multiple parameters in the same device, please utilise the 'repetition' option within the function as oppose to using multiple function calls for the same device. For multiple devices please see the [SetDevices](#) function within [Enhanced Web Services](#) section.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName?></ns:UserName>
      <ns:Password?></ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetSlave>
      <ns:Controller?></ns:Controller>
      <ns:Settings>
        <!--1 or more repetitions:-->
        <ns:Setting>
          <ns:Name?></ns:Name>
          <ns:Value?></ns:Value>
        </ns:Setting>
      </ns:Settings>
    </ns:SetSlave>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Username	Text string of the user name to access device
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.
Controller	Text string of the controller's ID/ name.
Name	Text string of the parameter's alias.
Value	Text string of the value the parameter is to be set to.

Example

Change controller '031's' parameter values for 'Cut-in temp' and 'Cut-in diff.';

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns:Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetSlave>
      <ns:Controller>031</ns:Controller>
      <ns:Settings>
        <ns:Setting>
          <ns:Name>Cut-in temp</ns:Name>
          <ns:Value>2.5</ns:Value>
        </ns:Setting>
        <ns:Setting>
          <ns:Name>Cut-in diff.</ns:Name>
          <ns:Value>1.0</ns:Value>
        </ns:Setting>
      </ns:Settings>
    </ns:SetSlave>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
SetSlaveResult	Returns a boolean value of either 'true' or 'false' depending if the action was successful or not.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <SetSlaveResponse xmlns="http://www.resourcedm.com/RDMServices/2012/06/18/">
      <SetSlaveResult>true</SetSlaveResult>
    </SetSlaveResponse>
  </soap:Body>
</soap:Envelope>
```

SetVirtuals

Sets the current values of the 'virtual' points used in a TDB program to the values passed within function.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName?</ns:UserName>
      <ns:Password?</ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetVirtuals>
      <!--1 or more repetitions!-->
      <ns:Virtual>
        <ns:Name?</ns:Name>
        <ns:Type?</ns:Type>
        <ns:Value?</ns:Value>
      </ns:Virtual>
    </ns:SetVirtuals>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Username	Text string of the user name to access device
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.
Virtual - Name	Text string of the virtual's name.
Virtual - Type	Text string of the virtual's type. Can be one of; 'Digital', 'Analogue', 'String' or 'Unknown'
Virtual - Value	Text string of the value the virtual is to be set to.

Example

Set current values of Value1 to an analogue value of 6, Value2 to an analogue value of 3 and Value3 to a digital value of 'on';

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns:Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetVirtuals>
      <ns:Virtual>
        <ns:Name>Value1</ns:Name>
        <ns:Type>Analogue</ns:Type>
        <ns:Value>6</ns:Value>
      </ns:Virtual>
      <ns:Virtual>
        <ns:Name>Value2</ns:Name>
        <ns:Type>Analogue</ns:Type>
        <ns:Value>3</ns:Value>
      </ns:Virtual>
      <ns:Virtual>
        <ns:Name>Value3</ns:Name>
        <ns:Type>Digital</ns:Type>
        <ns:Value>1</ns:Value>
      </ns:Virtual>
    </ns:SetVirtuals>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
VirtualResult - name	Returns text string of virtual's name.
VirtualResult - Result	Returns a boolean value of either 'true' or 'false' depending if the action was successful or not.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <SetVirtualsResponse xmlns="http://www.resourcedm.com/RDMServices/2012/06/18/">
      <SetVirtualsResult>
        <VirtualResult>
          <Name>Value1</Name>
          <Result>true</Result>
        </VirtualResult>
        <VirtualResult>
          <Name>Value2</Name>
          <Result>true</Result>
        </VirtualResult>
        <VirtualResult>
          <Name>Value3</Name>
          <Result>true</Result>
        </VirtualResult>
      </SetVirtualsResult>
    </SetVirtualsResponse>
  </soap:Body>
</soap:Envelope>
```

Data Manager & miniDM Enhanced Web Services (PR0490-EWS) Call & Functions

Enhanced Web Services is only available on the Data Manager platform. The additional functions; GetCpt, SetCpt and GetConfig must be activated either upon purchase of a new Data Manager or using the system's 'Add Feature' function following an order of part number PR0490-EWS. Please consult RDM Sales for more details.

The URL to get information on what is implemented in Enhanced Web services is;

<http://10.1.2.75/cgi-bin/web.cgi?WSDL>

This describes the functions currently available and the parameters they require. There is documentation in the service. Note the above is when connecting on Eth 0 (set to default 10.1.2.75), if you are viewing the Data Manager remotely you can use the IP address of Eth 1.

Outlined below are the functions available on the Enhanced Web Services;

Command	Description
GetConfig*	Returns the panel's configuration file.
GetCPT*	Returns detailed information for CPT setup.
GetDeviceCPT	Returns the CPT type for all devices.
GetDevices	Returns details and values of 1 or more device and their items.
GetGPTimerChannel	Returns detailed information for the given GP timer channel.
GetGPTimerChannels	Returns a list of the GP Timer channels in the DD/DM and their current status.
GetItemVisibility	Returns a list of the current visibility settings on a specified device.
GetServiceAvailability	Returns a list of all available services.
GetSystemLockout	Returns the current level of the System Lockout
SetCPT*	Sets the specified CPT channel to the given values.
SetDevice	Sets the given controller parameters to the values specified with an optional duration.
SetDeviceAlias	Sets the specified device to a given alias.
SetDeviceCPT	Sets the given controller CPT type to the value specified.
SetDeviceName	Sets the specified device's name.
SetDevices	Sets the given device(s) parameters to the value(s) specified.
SetGPTimerChannel	Sets the specified GP Timer channel to given values.
SetItemAliases	Sets the specified item's name within a given device.
SetItemVisibility	Set the visibility on a device for the specified items.
SetSystemLockout	Set the level of the System Lockout feature.

*Functions only available from activation of PR0490-EWS.

Some of the above features require the user to authenticate the webservice request with the Data Manager to make a connection. This username and password can be added through the Data Managers webpage's i.e., it is the same username/password which is used to access the service menus on the Data Manager. Note the password is encoded using SHA-1 hash, the username is plain text. Please see the [password section](#) for more details.

There is an option in the Data Manager to turn Web Services authentication off. This is found on the "Site Setup" page of the Data Manager and is termed "Authentication on Web Service", un-tick the box to disable authentication.

Anything that supports Web Services can be used to access the Data Manager interface.

Disclaimer

The specifications of the product detailed in this document may change without notice. RDM Ltd shall not be liable for errors or omissions, for incidental or consequential damages, directly or indirectly, in connection with the furnishing, performance or misuse of this product or document.

WARNING:

Please be aware that improper use of the Web Services functions can cause damage to the equipment. For example if too many writes are attempted in a short space of time or if large amounts of data is sent at once this can flood the system. Furthermore, as with any device using flash memory, writes are to be restricted to less than 5 per day, any more could result in damaged flash memory and void the warranty on the device.

GetConfig

This function will return the panel’s site configuration file in a Base64 format.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2017/03/24/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName?</ns:UserName>
      <ns:Password?</ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:GetConfig>
      <ns:Layouts?</ns:Layouts>
    </ns:GetConfig>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Username	Text string of the user name to access device.
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.
Layouts	Boolean value of either 'true' or 'false' to specify if the returned site configuration is to contain the layouts within the panel

Example

Request the panel’s site configuration containing layouts using user name/ password, install/ 1234;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2017/03/24/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns:Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:GetConfig>
      <ns:Layouts>true</ns:Layouts>
    </ns:GetConfig>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
GetConfigResult	Returns a boolean value of either 'true' or 'false' depending on if the action was successful or not. The returned data of the configuration file will be in the format Base64. Note: the data will need to be decoded using a Base64 decoder. Once the file is created, the file extension must be changed to ".config".

```
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetConfigResponse xmlns="http://www.resourcedm.com/RDMServices/2017/03/24/">
      <GetConfigResult>
        <Config>true</Config>
      </GetConfigResult>
    </GetConfigResponse>
  </soap:Body>
</soap:Envelope>
```

```
</GetConfigResponse>  
</soap:Body>  
</soap:Envelope>
```

```
--MIME_boundary  
Content-Type: application/octet-stream  
Content-Transfer-Encoding: 8bit  
Content-ID: RDM_DMTouch_2.config
```

BASE64 Encoded Data

```
--MIME_boundary--
```

GetCPT

Function will return detailed information on the given CPT channel.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2017/03/24/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>?</ns:UserName>
      <ns>Password>?</ns>Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:GetCPT>
      <ns:Index>?</ns:Index>
    </ns:GetCPT>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Username	Text string of the user name to access device.
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.
Index	Integer of the unique CPT channel ranging from 0 - 24.

Example

Request all details of CPT channel '0' using user name/ password, install/ 1234;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2017/03/24/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns>Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns>Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:GetCPT>
      <ns:Index>0</ns:Index>
    </ns:GetCPT>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
Index	An integer of the CPT Channel Number between 0 and 24.
Name	Text string of the CPT channel's description.
Weighting	A float value of the channel's CPT weighting ranging from 0 - 100.
Weighting Offset	A float value of the channel's CPT weighting offset ranging from 0 - 100
Constant	A float value of the channel's CPT constant ranging from 0 - 50000
Constant Offset	A float value of the channel's CPT constant offset ranging from 0 - 50000
CPT Delay	An integer of the channel's CPT delay ranging from 1 - 999
CPT Delay Offset	An integer of the channel's CPT delay offset ranging from 1 - 999
CPT OT Value	A float value of the channel's CPT Over temperature ranging from -99 - 250
CPT OT Value Offset	A float value of the channel's CPT Over temperature offset ranging from -99 - 250
CPT OT Critical	A Boolean value of either 'true' or 'false'
CPT UT Value	A float value of the channel's CPT Under temperature ranging from -99 - 250
CPT UT Value Offset	A float value of the channel's CPT Under temperature offset ranging from -99 - 250
CPT UT Critical	A Boolean value of either 'true' or 'false'

Air On Delay	An integer of the channel's Air On delay ranging from 1 – 999
Air On Delay Offset	An integer of the channel's Air On delay offset ranging from 1 – 999
Air On OT Value	A float value of the channel's Air On Over temperature ranging from -99 - 250
Air On OT Value Offset	A float value of the channel's Air On Over temperature offset ranging from -99 – 250
Air On OT Critical	A Boolean value of either 'true' or 'false'
Air On UT Value	A float value of the channel's Air On Under temperature ranging from -99 - 250
Air On UT Value Offset	A float value of the channel's Air On Under temperature offset ranging from -99 – 250
Air On UT Critical	A Boolean value of either 'true' or 'false'
Air Off Delay	An integer of the channel's Air Off delay ranging from 1 – 999
Air Off Delay Offset	An integer of the channel's Air Off delay offset ranging from 1 – 999
Air Off OT Value	A float value of the channel's Air Off Over temperature ranging from -99 - 250
Air Off OT Value Offset	A float value of the channel's Air Off Over temperature offset ranging from -99 – 250
Air Off OT Critical	A Boolean value of either 'true' or 'false'
Air Off UT Value	A float value of the channel's Air Off Under temperature ranging from -99 - 250
Air Off UT Value Offset	A float value of the channel's Air Off Under temperature offset ranging from -99 – 250
Air Off UT Critical	A Boolean value of either 'true' or 'false'

```

<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetCptChannelResponse xmlns="http://www.resourcedm.com/RDMServices/2017/03/24/">
      <GetCptChannelResult>
        <Index>0</Index>
        <Name>Meat, fish, poultry</Name>
        <Weighting>55.00</Weighting>
        <WeightingOffset>0.00</WeightingOffset>
        <Constant>2000.00</Constant>
        <ConstantOffset>0.00</ConstantOffset>
        <CptDelay>10</CptDelay>
        <CptDelayOffset>0</CptDelayOffset>
        <CptOtValue>3.00</CptOtValue>
        <CptOtValueOffset>0.00</CptOtValueOffset>
        <CptOtCritical>true</CptOtCritical>
        <CptUtValue>-1.00</CptUtValue>
        <CptUtValueOffset>0.00</CptUtValueOffset>
        <CptUtCritical>true</CptUtCritical>
        <AirOnDelay>60</AirOnDelay>
        <AirOnDelayOffset>0</AirOnDelayOffset>
        <AirOnOtValue>6.00</AirOnOtValue>
        <AirOnOtValueOffset>0.00</AirOnOtValueOffset>
        <AirOnOtCritical>true</AirOnOtCritical>
        <AirOnUtValue>-1.00</AirOnUtValue>
        <AirOnUtValueOffset>0.00</AirOnUtValueOffset>
        <AirOnUtCritical>true</AirOnUtCritical>
        <AirOffDelay>60</AirOffDelay>
        <AirOffDelayOffset>0</AirOffDelayOffset>
        <AirOffOtValue>1.00</AirOffOtValue>
        <AirOffOtValueOffset>0.00</AirOffOtValueOffset>
        <AirOffOtCritical>true</AirOffOtCritical>
        <AirOffUtValue>-10.00</AirOffUtValue>
        <AirOffUtValueOffset>0.00</AirOffUtValueOffset>
        <AirOffUtCritical>true</AirOffUtCritical>
      </GetCptChannelResult>
    </GetCptChannelResponse>
  </soap:Body>
</soap:Envelope>

```

GetDeviceCPT

Function will return the CPT type for all devices.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2019/05/14/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>?</ns:UserName>
      <ns>Password>?</ns>Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:GetDeviceCPT/>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Username	Text string of the user name to access device.
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.

Example

Request the list of all devices CPT's using user name/ password install/ 1234;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2019/05/14/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns>Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns>Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:GetDeviceCPT/>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
Device	Text string of the device's ID/ name.
Index	An integer of the CPT Channel Number between 0 and 24.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetDeviceCPTResponse xmlns="http://www.resourcedm.com/RDMServices/2019/05/14/">
      <GetDeviceCPTResult>
        <DeviceCpt>
          <Device> 0104H1</Device>
          <Index> 1</Index>
        </DeviceCpt>
        <DeviceCpt>
          <Device> 0105H1</Device>
          <Index> 2</Index>
        </DeviceCpt>
      </GetDeviceCPTResult>
    </GetDeviceCPTResponse>
  </soap:Body>
</soap:Envelope>
```

GetDevices

This function will return the network status of a device, along with detailed information of the items and values if requested

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2018/01/05/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetDevices>
      <!--1 or more repetitions:-->
      <ns:GetDevice>
        <ns:Device?</ns:Device>
        <!--Optional:-->
        <ns:Names>
          <!--1 or more repetitions:-->
          <ns:Name?</ns:Name>
        </ns:Names>
      </ns:GetDevice>
    </ns:GetDevices>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Device	Text string of the device's ID/ name.
Name	Text string of the device's item name.

Example

Request details on the controllers '01a' and '02a', including current Evap pressures (Evap Press), Refrigerant of 01a and Span of 02a;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2018/01/05/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetDevices>
      <ns:GetDevice>
        <ns:Device>01a</ns:Device>
        <ns:Names>
          <ns:Name>Evap Press</ns:Name>
          <ns:Name>Refrigerant</ns:Name>
        </ns:Names>
      </ns:GetDevice>
      <ns:GetDevice>
        <ns:Device>02a</ns:Device>
        <ns:Names>
          <ns:Name>Evap Press</ns:Name>
          <ns:Name>Span</ns:Name>
        </ns:Names>
      </ns:GetDevice>
    </ns:GetDevices>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
Description	Text String of the device's description alias
Network – Status	Text string of the device's current status. Will be either; 'Offline' or 'Online'.
Network – Time	The time in ISO8601 format the device has been 'Online' or 'Offline' from.
Item – Class	Text string of the item's type. Will be either; 'Input', 'Output', 'Parameter' or 'State'.
Item – Name	Text string of the item's alias.
Item – Value	Text string of the item's current value.
Item – Units	Text string of the item's units
Detail – Type	Text string of the specific Detail's type. Can be either; 'Numeric', 'String', 'Time' or 'Date'.
Detail – String	Text string of the specific Detail's possible values that can be chosen.
Detail – Min	Text string of the specific Detail's minimum value.
Detail – Max	Text string of the specific Detail's maximum value.
Detail – Step	Text string of the specific Detail's step.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetDevicesResponse xmlns="http://www.resourcedm.com/RDMServices/2018/01/05/">
      <GetDeviceResult>
        <Description>Mercury Hub degC/bar</Description>
        <Network>
          <Status>Online</Status>
          <Time>2018-01-11T15:08:30Z</Time>
        </Network>
        <Items>
          <Item>
            <Class>Input</Class>
            <Name>Evap Press</Name>
            <Value>2.9</Value>
            <Units>bar</Units>
          </Item>
          <Item>
            <Class>Parameter</Class>
            <Name>Refrigerant</Name>
            <Value>R404A</Value>
            <Units/>
            <Detail>
              <Type>String</Type>
              <Strings>
                <String>None</String>
                <String>R22</String>
                <String>R32</String>
                <String>R134a</String>
                <String>R142B</String>
                <String>R227</String>
                <String>R401A</String>
                <String>R401B</String>
                <String>R401C</String>
                <String>R402A</String>
                <String>R402B</String>
                <String>R404A</String>
                <String>R407A</String>
                <String>R407B</String>
                <String>R407C</String>
                <String>R500</String>
                <String>R502</String>
                <String>R503</String>
                <String>R507</String>
                <String>R717</String>
                <String>R290</String>
                <String>R744</String>
                <String>R407F</String>
                <String>R410A</String>
                <String>R449A</String>
              </Strings>
            </Detail>
          </Item>
        </Items>
      </GetDeviceResult>
    </GetDevicesResponse>
  </soap:Body>
</soap:Envelope>
```

```
        <String>R513A</String>
      </Strings>
    </Detail>
  </Item>
</Items>
</GetDeviceResult>
<GetDeviceResult>
  <Description>Mercury Hub degC/bar</Description>
  <Network>
    <Status>Online</Status>
    <Time>2018-01-11T15:08:31Z</Time>
  </Network>
  <Items>
    <Item>
      <Class>Input</Class>
      <Name>Evap Press</Name>
      <Value>3.9</Value>
      <Units>bar</Units>
    </Item>
    <Item>
      <Class>Parameter</Class>
      <Name>Span</Name>
      <Value>8.0</Value>
      <Units>bar</Units>
      <Detail>
        <Type>Numeric</Type>
        <Min>-3.4</Min>
        <Max>180.0</Max>
        <Step>0.1</Step>
      </Detail>
    </Item>
  </Items>
</GetDeviceResult>
</GetDevicesResponse>
</soap:Body>
</soap:Envelope>
```

GetGPTimerChannel

Returns the current schedule of the specified GP Timer Channel. The Data Manager has 40 available channels.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetGPTimerChannel>
      <ns:Index>?</ns:Index>
    </ns:GetGPTimerChannel>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Index	A positive integer ranging between; 1 and 100. This specifies the GP Timer channel the function will interrogate.

Example

Requesting the details of GP Timer channel 1;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetGPTimerChannel>
      <ns:Index>1</ns:Index>
    </ns:GetGPTimerChannel>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
Index	A positive integer of the GP Channel Number between 1 and 100.
Type	Text string of the type, the GP Channel is set to; "Master" or "Slave".
Name	Text string of the GP channel's description.
OutputType	Text string of the output type used in the GP Channel. Will be one of; 'Case', 'General', 'Local Relay' or 'Transmit'.
OutputMask	Text string of the output mask used in the GP Channel.
OutputIndex	A positive integer of the output channel used in the GP Channel. Ranging from 1 - X, where X is bound by the number of outputs a specific device has.
InputType	Text string of the input type used in the GP Channel. Will be one of; 'Unused', 'Force On', 'Force Off', 'And' or 'Toggle'.
Input Controller	Text string of the input device.
InputIndex	A positive integer defining the 'input device's' input channel number.
MasterChannel	If GP Timer channel is of type 'Master', this will be returned as a '0'. Else, if set to a 'Slave', the slave's master channel will be returned i.e., a positive integer between 1 and 100.
Invert	Boolean of if the GP channel is set to invert or not. Will be either; 'true' or 'false'.
Overridable	Boolean of if the GP channel is set to allow overrides or not. Will be either; 'true' or 'false'.
GPEvent - Type	A text string of the 'GP Event's' Type; "Unused", "Day", "Week", "Year", "Once" or "Slave". If channel is set as a 'slave', this will return 'Slave'.
GPEvent - DayMask	A positive integer between 1 and 64; 1: Sunday 2: Monday 4: Tuesday 8: Wednesday 16: Thursday 32: Friday

	64: Saturday If unused, will return 0.
GPEvent - Day	A positive integer between 1 and 31. Represents a date. If unused will return 0.
GPEvent - Month	A positive integer between 1 and 12. Represents a month. If unused will return 0.
GPEvent - Year	A positive integer between 1 and 9999. Represents a year. If unused will return 0.
GPEvent - OnTime1	A positive or negative integer between -720 and +1440. Time in minutes. If unused will return 0.
GPEvent - OffTime1	A positive or negative integer between -720 and +1440. Time in minutes. If unused will return 0.
GPEvent - OnTime2	A positive or negative integer between -720 and +1440. Time in minutes. If unused will return 0.
GPEvent - OffTime2	A positive or negative integer between -720 and +1440. Time in minutes. If unused will return 0.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetGPTimerChannelResponse xmlns="http://www.resourcedm.com/RDMServices/2012/06/18/">
      <GetGPTimerChannelResult>
        <Index>1</Index>
        <Type>Master</Type>
        <Name>Trading Times</Name>
        <OutputType>Case</OutputType>
        <OutputMask>??</OutputMask>
        <OutputIndex>0</OutputIndex>
        <InputType>Force On</InputType>
        <InputController>002</InputController>
        <InputIndex>0</InputIndex>
        <MasterChannel>0</MasterChannel>
        <Invert>>false</Invert>
        <Overridable>>true</Overridable>
        <Events>
          <GPEvent>
            <Type>Week</Type>
            <DayMask>2</DayMask>
            <Day>0</Day>
            <Month>0</Month>
            <Year>0</Year>
            <OnTime1>480</OnTime1>
            <OffTime1>750</OffTime1>
            <OnTime2>810</OnTime2>
            <OffTime2>1200</OffTime2>
          </GPEvent>
          <GPEvent>
            <Type>Week</Type>
            <DayMask>4</DayMask>
            <Day>0</Day>
            <Month>0</Month>
            <Year>0</Year>
            <OnTime1>480</OnTime1>
            <OffTime1>750</OffTime1>
            <OnTime2>810</OnTime2>
            <OffTime2>1200</OffTime2>
          </GPEvent>
          <GPEvent>
            <Type>Week</Type>
            <DayMask>8</DayMask>
            <Day>0</Day>
            <Month>0</Month>
            <Year>0</Year>
            <OnTime1>480</OnTime1>
            <OffTime1>750</OffTime1>
            <OnTime2>810</OnTime2>
            <OffTime2>1200</OffTime2>
          </GPEvent>
          <GPEvent>
            <Type>Week</Type>
            <DayMask>16</DayMask>
            <Day>0</Day>
            <Month>0</Month>
          </GPEvent>
        </Events>
      </GetGPTimerChannelResult>
    </GetGPTimerChannelResponse>
  </soap:Body>
</soap:Envelope>
```

```
<Year>0</Year>
<OnTime1>480</OnTime1>
<OffTime1>750</OffTime1>
<OnTime2>810</OnTime2>
<OffTime2>1200</OffTime2>
</GPEvent>
</Events>
</GetGPTimerChannelResult>
</GetGPTimerChannelResponse>
</soap:Body>
</soap:Envelope>
```

GetGPTimerChannels

Returns the current statuses of all GP Timer Channels.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2017/03/24/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>?</ns:UserName>
      <ns>Password>?</ns>Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:GetGPTimerChannels/>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Username	Text string of the user name to access device
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.

Example

Request state of all GP Timer Channels using user name/ password install/ 1234;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2017/03/24/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns>Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns>Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:GetGPTimerChannels/>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
Index	A positive integer of the GP Channel Number between 1 and 100.
Name	A text string of the GP channel's description.
Status	A text string of the GP channel's current state; returns either 'true' or 'false'.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetGPTimerChannelsResponse xmlns="http://www.resourcedm.com/RDMServices/2012/06/18/">
      <GetGPTimerChannelsResult>
        <GPChannel>
          <Index>1</Index>
          <Name>Trading Times</Name>
          <Status>>false</Status>
        </GPChannel>
        <GPChannel>
          <Index>2</Index>
          <Name>Cafe Lights</Name>
          <Status>>false</Status>
        </GPChannel>
      </GetGPTimerChannelsResult>
    </GetGPTimerChannelsResponse>
  </soap:Body>
</soap:Envelope>
```

```
<Index>3</Index>
<Name>Cabinet Lights</Name>
<Status>>false</Status>
</GPChannel>
:
:
:
<GPChannel>
<Index>40</Index>
<Name>Global GP Channel 8</Name>
<Status>>false</Status>
</GPChannel>
</GetGPTimerChannelsResult>
</GetGPTimerChannelsResponse>
</soap:Body>
</soap:Envelope>
```

GetItemVisibility

Request to obtain the current visibility of the specified controller items.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2022/03/28/">
  <soapenv:Header>
  </soapenv:Header>
  <soapenv:Body>
    <ns:GetItemVisibility>
      <ns:Controller>?</ns:Controller>
    </ns:GetItemVisibility>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Controller	Text string of the controller ID

Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2022/03/28/">
  <soapenv:Header>
  </soapenv:Header>
  <soapenv:Body>
    <ns:GetItemVisibility>
      <ns:Controller>DISPLAY</ns:Controller>
    </ns:GetItemVisibility>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
Name	A text string of the devices item name.
Status	A text string of the type of visibility that the devices items has been set to; All, Site, Service, Install or Hide.

```
soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetItemVisibilityResponse xmlns="http://www.resourcedm.com/RDMServices/2022/03/28/">
      <GetItemVisibilityResult>
        <ItemVisibility>
          <Item>
            <Name>Total value</Name>
            <Visibility>All</Visibility>
          </Item>
          <Item>
            <Name>High limit</Name>
            <Visibility>Site</Visibility>
          </Item>
          <Item>
            <Name>High warn</Name>
            <Visibility>Service</Visibility>
          </Item>
          <Item>
            <Name>Low limit</Name>
            <Visibility>Install</Visibility>
          </Item>
        </ItemVisibility>
      </GetItemVisibilityResult>
    </GetItemVisibilityResponse>
  </soap:Body>
```

```
<Item>
  <Name>Low warn</Name>
  <Visibility>Hide</Visibility>
</Item>
<Item>
  <Name>Alarm delay</Name>
  <Visibility>Install</Visibility>
</Item>
<Item>
  <Name>Warn delay</Name>
  <Visibility>Service</Visibility>
</Item>
</ItemVisibility>
</GetItemVisibilityResult>
</GetItemVisibilityResponse>
</soap:Body>
</soap:Envelope>
```

GetServiceAvailability

Request to obtain the current web services features active on the Data Manager.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2017/03/24/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName?></ns:UserName>
      <ns:Password?></ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:GetServiceAvailability/>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Username	Text string of the user's name to access device
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.

Example

Obtain current services available on panel using user name/ password, install/ 1234;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2017/03/24/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns:Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:GetServiceAvailability/>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
GetServiceAvailabilityResult	Returns boolean values of either 'true' or 'false' on the available services.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetServiceAvailabilityResponse xmlns="http://www.resourcedm.com/RDMServices/2017/03/24/">
      <GetServiceAvailabilityResult>
        <GetGPTimerChannels>true</GetGPTimerChannels>
        <GetGPTimerChannel>true</GetGPTimerChannel>
        <SetGPTimerChannel>true</SetGPTimerChannel>
        <GetCpt>true</GetCpt>
        <SetCpt>true</SetCpt>
        <GetConfig>true</GetConfig>
      </GetServiceAvailabilityResult>
    </GetServiceAvailabilityResponse>
  </soap:Body>
</soap:Envelope>
```

GetSystemLockout

Function will show what level the System Lockout feature has been set to.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2022/03/28/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>?</ns:UserName>
      <ns>Password>?</ns>Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:GetSystemLockout/>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Username	Text string of the user's name to access device.
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.

Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2022/03/28/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns>Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns>Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:GetSystemLockout/>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

Fields	Details
GetSystemLockout	Returns a A text string of either; "Normal", "Site", "Service", "Install".

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetSystemLockoutResponse xmlns="http://www.resourcedm.com/RDMServices/2022/03/28/">
      <GetSystemLockoutResult>
        <SystemLockout>Install</SystemLockout>
      </GetSystemLockoutResult>
    </GetSystemLockoutResponse>
  </soap:Body>
</soap:Envelope>
```

SetCPT

Function will permit the remote setup of a specified CPT channel.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2017/03/24/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>?</ns:UserName>
      <ns:Password>?</ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetCPT>
      <ns:Index>?</ns:Index>
      <ns:Name>?</ns:Name>
      <ns:Weighting>?</ns:Weighting>
      <ns:WeightingOffset>?</ns:WeightingOffset>
      <ns:Constant>?</ns:Constant>
      <ns:ConstantOffset>?</ns:ConstantOffset>
      <ns:CptDelay>?</ns:CptDelay>
      <ns:CptDelayOffset>?</ns:CptDelayOffset>
      <ns:CptOtValue>?</ns:CptOtValue>
      <ns:CptOtValueOffset>?</ns:CptOtValueOffset>
      <ns:CptOtCritical>?</ns:CptOtCritical>
      <ns:CptUtValue>?</ns:CptUtValue>
      <ns:CptUtValueOffset>?</ns:CptUtValueOffset>
      <ns:CptUtCritical>?</ns:CptUtCritical>
      <ns:AirOnDelay>?</ns:AirOnDelay>
      <ns:AirOnDelayOffset>?</ns:AirOnDelayOffset>
      <ns:AirOnOtValue>?</ns:AirOnOtValue>
      <ns:AirOnOtValueOffset>?</ns:AirOnOtValueOffset>
      <ns:AirOnOtCritical>?</ns:AirOnOtCritical>
      <ns:AirOnUtValue>?</ns:AirOnUtValue>
      <ns:AirOnUtValueOffset>?</ns:AirOnUtValueOffset>
      <ns:AirOnUtCritical>?</ns:AirOnUtCritical>
      <ns:AirOffDelay>?</ns:AirOffDelay>
      <ns:AirOffDelayOffset>?</ns:AirOffDelayOffset>
      <ns:AirOffOtValue>?</ns:AirOffOtValue>
      <ns:AirOffOtValueOffset>?</ns:AirOffOtValueOffset>
      <ns:AirOffOtCritical>?</ns:AirOffOtCritical>
      <ns:AirOffUtValue>?</ns:AirOffUtValue>
      <ns:AirOffUtValueOffset>?</ns:AirOffUtValueOffset>
      <ns:AirOffUtCritical>?</ns:AirOffUtCritical>
    </ns:SetCPT>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Username	Text string of the user's name to access device.
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.
Index	An integer of the CPT Channel Number between 0 and 24.
Name	Text string of the CPT channel's description.
Weighting	A float value of the channel's CPT weighting ranging from 0 – 100.
Weighting Offset	A float value of the channel's CPT weighting offset ranging from 0 – 100
Constant	A float value of the channel's CPT constant ranging from 0 - 50000
Constant Offset	A float value of the channel's CPT constant offset ranging from 0 - 50000
CPT Delay	An integer of the channel's CPT delay ranging from 1 – 999
CPT Delay Offset	An integer of the channel's CPT delay offset ranging from 1 – 999
CPT OT Value	A float value of the channel's CPT Over temperature ranging from -99 - 250
CPT OT Value Offset	A float value of the channel's CPT Over temperature offset ranging from -99 – 250
CPT OT Critical	A Boolean value of either 'true' or 'false'
CPT UT Value	A float value of the channel's CPT Under temperature ranging from -99 - 250

CPT UT Value Offset	A float value of the channel's CPT Under temperature offset ranging from -99 - 250
CPT UT Critical	A Boolean value of either 'true' or 'false'
Air On Delay	An integer of the channel's Air On delay ranging from 1 - 999
Air On Delay Offset	An integer of the channel's Air On delay offset ranging from 1 - 999
Air On OT Value	A float value of the channel's Air On Over temperature ranging from -99 - 250
Air On OT Value Offset	A float value of the channel's Air On Over temperature offset ranging from -99 - 250
Air On OT Critical	A Boolean value of either 'true' or 'false'
Air On UT Value	A float value of the channel's Air On Under temperature ranging from -99 - 250
Air On UT Value Offset	A float value of the channel's Air On Under temperature offset ranging from -99 - 250
Air On UT Critical	A Boolean value of either 'true' or 'false'
Air Off Delay	An integer of the channel's Air Off delay ranging from 1 - 999
Air Off Delay Offset	An integer of the channel's Air Off delay offset ranging from 1 - 999
Air Off OT Value	A float value of the channel's Air Off Over temperature ranging from -99 - 250
Air Off OT Value Offset	A float value of the channel's Air Off Over temperature offset ranging from -99 - 250
Air Off OT Critical	A Boolean value of either 'true' or 'false'
Air Off UT Value	A float value of the channel's Air Off Under temperature ranging from -99 - 250
Air Off UT Value Offset	A float value of the channel's Air Off Under temperature offset ranging from -99 - 250
Air Off UT Critical	A Boolean value of either 'true' or 'false'

Example

Set CPT channel 1 with the following details, using user name and password install/ 1234;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2017/03/24/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns>Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns>Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetCPT>
      <ns:Index>1</ns:Index>
      <ns>Name>Fresh Meat</ns>Name>
      <ns:Weighting>55</ns:Weighting>
      <WeightingOffset>0.00</WeightingOffset>
      <Constant>2500.00</Constant>
      <ConstantOffset>0.00</ConstantOffset>
      <CptDelay>20</CptDelay>
      <CptDelayOffset>0</CptDelayOffset>
      <CptOtValue>3.00</CptOtValue>
      <CptOtValueOffset>0.00</CptOtValueOffset>
      <CptOtCritical>true</CptOtCritical>
      <CptUtValue>-1.00</CptUtValue>
      <CptUtValueOffset>0.00</CptUtValueOffset>
      <CptUtCritical>true</CptUtCritical>
      <AirOnDelay>40</AirOnDelay>
      <AirOnDelayOffset>0</AirOnDelayOffset>
      <AirOnOtValue>6.00</AirOnOtValue>
      <AirOnOtValueOffset>0.00</AirOnOtValueOffset>
      <AirOnOtCritical>true</AirOnOtCritical>
      <AirOnUtValue>-1.00</AirOnUtValue>
      <AirOnUtValueOffset>0.00</AirOnUtValueOffset>
      <AirOnUtCritical>true</AirOnUtCritical>
      <AirOffDelay>40</AirOffDelay>
      <AirOffDelayOffset>0</AirOffDelayOffset>
      <AirOffOtValue>1.00</AirOffOtValue>
      <AirOffOtValueOffset>0.00</AirOffOtValueOffset>
      <AirOffOtCritical>true</AirOffOtCritical>
      <AirOffUtValue>-8.00</AirOffUtValue>
      <AirOffUtValueOffset>0.00</AirOffUtValueOffset>
      <AirOffUtCritical>true</AirOffUtCritical>
    </ns:SetCPT>
  </soapenv:Body>
</soapenv:Envelope>
```

```
</ns:SetCPT>  
</soapenv:Body>  
</soapenv:Envelope>
```

Returns

Fields	Details
SetCPTResult	Returns a boolean value of either 'true' or 'false' depending if the action was successful or not.

SetDevice

The functions sets the given controller parameters to the values specified.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2019/05/14/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName?</ns:UserName>
      <ns:Password?</ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetDevice>
      <ns:Device?</ns:Device>
      <ns:Settings>
        <!--1 or more repetitions:-->
        <ns:SettingDuration>
          <ns:Name?</ns:Name>
          <ns:Value?</ns:Value>
          <!--Optional:-->
          <ns:Duration?</ns:Duration>
        </ns:SettingDuration>
      </ns:Settings>
    </ns:SetDevice>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
UserName	Text string of the user name to access device.
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.
Device	Text string of the device's ID/ name.
Name	Text string of the parameter's alias.
Value	Text string of the value the parameter is to be set to.
Duration	Time period in minutes the parameter is to be set for.

Example

Change device 550's parameter Cut-in temp to 5 DegC using user name/ password, install/ 1234 for 15 minutes.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2019/05/14/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns:Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetDevice>
      <ns:Device>550</ns:Device>
      <ns:Settings>
        <ns:SettingDuration>
          <ns:Name>Cut-in temp</ns:Name>
          <ns:Value>5.0</ns:Value>
          <ns:Duration>15</ns:Duration>
        </ns:SettingDuration>
      </ns:Settings>
    </ns:SetDevice>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
SetSlaveResult	Returns a boolean value of either 'true' or 'false' depending if the action was successful or not.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <SetSlaveResponse xmlns="http://www.resourcedm.com/RDMServices/2019/05/14/">
      <SetSlaveResult>true</SetSlaveResult>
    </SetSlaveResponse>
  </soap:Body>
</soap:Envelope>
```

SetDeviceAlias

This function will set the specified device with the given alias.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2018/01/05/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName?></ns:UserName>
      <ns:Password?></ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetDeviceAlias>
      <ns:Device?></ns:Device>
      <ns:Alias?></ns:Alias>
    </ns:SetDeviceAlias>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
UserName	Text string of the user name to access device.
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.
Device	Text string of the device's ID/ name.
Alias	Text string of the alias the device is to be given.

Example

Change the device '011' to have the alias 'HT1 Pack' using user name/ password, install/ 1234;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2018/01/05/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns:Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetDeviceAlias>
      <ns:Device>011</ns:Device>
      <ns:Alias>HT1 Pack</ns:Alias>
    </ns:SetDeviceAlias>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
SetDeviceAliasResult	Returns a boolean value of either 'true' or 'false' depending if the action was successful or not.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <SetDeviceAliasResponse xmlns="http://www.resourcedm.com/RDMServices/2018/01/05/">
      <SetDeviceAliasResult>true</SetDeviceAliasResult>
    </SetDeviceAliasResponse>
  </soap:Body>
</soap:Envelope>
```

SetDeviceCPT

Function will set the given controller CPT type to the value specified.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2019/05/14/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName?></ns:UserName>
      <ns:Password?></ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetDeviceCPT>
      <ns:Device?></ns:Device>
      <ns:CptIndex?></ns:CptIndex>
    </ns:SetDeviceCPT>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Username	Text string of the user's name to access device.
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.
Device	Text string of the device's ID/ name.
CptIndex	An integer of the CPT Channel Number between 0 and 24.

Example

Set the device 550 to the CPT index of 2 using user name/ password install/ 1234;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2019/05/14/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns:Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetDeviceCPT>
      <ns:Device>550</ns:Device>
      <ns:CptIndex>2</ns:CptIndex>
    </ns:SetDeviceCPT>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
SetDeviceCPTResult	Returns a boolean value of either 'true' or 'false' depending if the action was successful or not.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <SetDeviceCPTResponse xmlns="http://www.resourcedm.com/RDMServices/2019/05/14/">
      <SetDeviceCPTResult>true</SetDeviceCPTResult>
    </SetDeviceCPTResponse>
  </soap:Body>
</soap:Envelope>
```

SetDeviceName

This function will set the specified device to the given Name.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2018/01/05/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName?></ns:UserName>
      <ns:Password?></ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetDeviceName>
      <ns:Device?></ns:Device>
      <ns:Alias?></ns:Alias>
    </ns:SetDeviceName>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
UserName	Text string of the user's name to access device.
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.
Device	Text string of the device's ID/ name.
Alias	Text string of the name the device is to be given.

Example

Change the device '011' to have the name 'Pack-A' using user name/ password, install/ 1234;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2018/01/05/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns:Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetDeviceName>
      <ns:Device>011</ns:Device>
      <ns:Alias>Pack-A</ns:Alias>
    </ns:SetDeviceName>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
SetDeviceNameResult	Returns a boolean value of either 'true' or 'false' depending if the action was successful or not.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <SetDeviceNameResponse xmlns="http://www.resourcedm.com/RDMServices/2018/01/05/">
      <SetDeviceNameResult>true</SetDeviceNameResult>
    </SetDeviceNameResponse>
  </soap:Body>
</soap:Envelope>
```

SetDevices

The function allows multiple devices to have multiple parameters set.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2018/01/05/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName?></ns:UserName>
      <ns:Password?></ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetDevices>
      <!--1 or more repetitions!-->
      <ns:SetDevice>
        <ns:Device?></ns:Device>
        <ns:Settings>
          <!--1 or more repetitions!-->
          <ns:Setting>
            <ns:Name?></ns:Name>
            <ns:Value?></ns:Value>
          </ns:Setting>
        </ns:Settings>
      </ns:SetDevice>
    </ns:SetDevices>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
UserName	Text string of the user name to access device.
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.
Device	Text string of the device's ID/ name.
Name	Text string of the parameter's alias.
Value	Text string of the value the parameter is to be set to.

Example

Change devices 01a's and 02a's parameters Refrigerant and Span using user name/ password, install/ 1234;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2018/01/05/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns:Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetDevices>
      <ns:SetDevice>
        <ns:Device>01a</ns:Device>
        <ns:Settings>
          <ns:Setting>
            <ns:Name>Refrigerant</ns:Name>
            <ns:Value>24</ns:Value>
          </ns:Setting>
          <ns:Setting>
            <ns:Name>Span</ns:Name>
            <ns:Value>8.0</ns:Value>
          </ns:Setting>
        </ns:Settings>
      </ns:SetDevice>
    </ns:SetDevices>
  </soapenv:Body>
</soapenv:Envelope>
```

```

<ns:Device>02a</ns:Device>
<ns:Settings>
  <ns:Setting>
    <ns:Name>Refrigerant</ns:Name>
    <ns:Value>24</ns:Value>
  </ns:Setting>
  <ns:Setting>
    <ns:Name>Span</ns:Name>
    <ns:Value>8.0</ns:Value>
  </ns:Setting>
</ns:Settings>
</ns:SetDevice>
</ns:SetDevices>
</soapenv:Body>
</soapenv:Envelope>

```

Returns

The function will return;

Fields	Details
SetDeviceResult	Returns a boolean value of either 'true' or 'false' depending if the action was successful or not.

```

<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <SetDevicesResponse xmlns="http://www.resourcedm.com/RDMServices/2018/01/05/">
      <SetDeviceResult>true</SetDeviceResult>
      <SetDeviceResult>true</SetDeviceResult>
    </SetDevicesResponse>
  </soap:Body>
</soap:Envelope>

```

SetGPTimerChannel

Edit and or set a specific GP Timer channel.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName?</ns:UserName>
      <ns:Password?</ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetGPTimerChannel>
      <ns:Index?</ns:Index>
      <ns:Type?</ns:Type>
      <ns:Name?</ns:Name>
      <ns:OutputType?</ns:OutputType>
      <ns:OutputMask?</ns:OutputMask>
      <ns:OutputIndex?</ns:OutputIndex>
      <ns:InputType?</ns:InputType>
      <ns:InputController?</ns:InputController>
      <ns:InputIndex?</ns:InputIndex>
      <ns:MasterChannel?</ns:MasterChannel>
      <ns:Invert?</ns:Invert>
      <ns:Overridable?</ns:Overridable>
      <!--Optional:-->
      <ns:Events>
        <!--Zero or more repetitions:-->
        <ns:GPEvent>
          <ns:Type?</ns:Type>
          <ns:DayMask?</ns:DayMask>
          <ns:Day?</ns:Day>
          <ns:Month?</ns:Month>
          <ns:Year?</ns:Year>
          <ns:OnTime1?</ns:OnTime1>
          <ns:OffTime1?</ns:OffTime1>
          <ns:OnTime2?</ns:OnTime2>
          <ns:OffTime2?</ns:OffTime2>
        </ns:GPEvent>
      </ns:Events>
    </ns:SetGPTimerChannel>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Username	Text string of the user's name to access device
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.
Index	A positive integer of the GP Channel Number between 1 and 100.
Type	Text string of the type, the GP Channel is to be; "Master" or "Slave".
Name	Text string of the GP channel's description.
OutputType	Text string of the output type used in the GP Channel. Will be one of; 'Case', 'General', 'Local Relay' or 'Transmit'.
OutputMask	Text string of the output mask used in the GP Channel.
OutputIndex	A positive integer of the output channel used in the GP Channel. Ranging from 1 – X, where X is bound by the number of outputs a specific device has.
InputType	Text string of the input type used in the GP Channel. Will be one of; 'Unused', 'Force On', 'Force Off', 'And' or 'Toggle'.
Input Controller	Text string of the input device.
InputIndex	A positive integer defining the 'input device's' input channel number.
MasterChannel	If the GP Timer channel is to be of type 'Master', set to '0'. Else, if it is set to a 'Slave', the slave's master channel is to be entered. To be a positive integer between 1 and 100.
Invert	Boolean of if the GP channel is set to invert or not. Can be either; 'true' or 'false'.

Overridable	Boolean of if the GP channel is set to allow overrides or not. Can be either; 'true' or 'false'.
GPEvent - Type	A text string of the 'GP Event's' Type; "Unused", "Day", "Week", "Year", "Once" or "Slave". If channel is to be set as a type 'slave', input 'Slave'.
GPEvent - DayMask	A positive integer between 1 and 64; 1: Sunday 2: Monday 4: Tuesday 8: Wednesday 16: Thursday 32: Friday 64: Saturday If unused, enter '0'.
GPEvent - Day	A positive integer between 1 and 31. Represents a date. If unused enter '0'.
GPEvent - Month	A positive integer between 1 and 12. Represents a month. If unused enter '0'.
GPEvent - Year	A positive integer between 1 and 9999. Represents a year. If unused enter '0'.
GPEvent - OnTime1	A positive or negative integer between -720 and +1440. Time in minutes. If unused enter '0'.
GPEvent - OffTime1	A positive or negative integer between -720 and +1440. Time in minutes If unused enter '0'.
GPEvent - OnTime2	A positive or negative integer between -720 and +1440. Time in minutes If unused enter '0'.
GPEvent - OffTime2	A positive or negative integer between -720 and +1440. Time in minutes. If unused enter '0'.

Example

Set GP timer channel 14 to have a daily 'on' period of between 09:00 – 10:00 and 13:00 – 15:00. Setting it to master and controlling the local relay;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2012/06/18/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns>Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns>Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetGPTimerChannel>
      <ns:Index>14</ns:Index>
      <ns:Type>Master</ns:Type>
      <ns:Name>GP Timer Channel 14</ns:Name>
      <ns:OutputType>Local Relay</ns:OutputType>
      <ns:OutputMask>0</ns:OutputMask>
      <ns:OutputIndex>4</ns:OutputIndex>
      <ns:InputType>Unused</ns:InputType>
      <ns:InputController>0</ns:InputController>
      <ns:InputIndex>0</ns:InputIndex>
      <ns:MasterChannel>0</ns:MasterChannel>
      <ns:Invert>>false</ns:Invert>
      <ns:Overridable>>true</ns:Overridable>
      <ns:Events>
        <ns:GPEvent>
          <Type>Day</Type>
          <DayMask>0</DayMask>
          <Day>0</Day>
          <Month>0</Month>
          <Year>0</Year>
          <OnTime1>540</OnTime1>
          <OffTime1>600</OffTime1>
          <OnTime2>780</OnTime2>
          <OffTime2>900</OffTime2>
        </ns:GPEvent>
      </ns:Events>
    </ns:SetGPTimerChannel>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
SetGPTimerChannelResult	Returns a boolean value of either 'true' or 'false' depending if the action was successful or not.

SetItemAliases

This function will set the specified device's item(s) to the given alias(es).

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2018/01/05/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName?></ns:UserName>
      <ns:Password?></ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetItemAliases>
      <ns:Device?></ns:Device>
      <ns:Aliases>
        <!--1 or more repetitions:-->
        <ns:Alias>
          <ns:Item?></ns:Item>
          <ns:ItemAlias?></ns:ItemAlias>
        </ns:Alias>
      </ns:Aliases>
    </ns:SetItemAliases>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
UserName	Text string of the user's name to access device.
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.
Device	Text string of the device's ID/ name.
Item	Text string of the device's Item.
ItemAlias	Text string of the alias the device is to be given.

Example

On the device 'Pack-A' change the items aliases from 'Sect 1 Suc Press' and 'Sect 2 Dis Press' to 'HT Suc Press' and 'HT Dis Press' respectively using user name/ password, install/ 1234;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2018/01/05/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns:Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetItemAliases>
      <ns:Device>Pack-A</ns:Device>
      <ns:Aliases>
        <ns:Alias>
          <ns:Item>Sect 1 Suc Press</ns:Item>
          <ns:ItemAlias>HT Suc Press</ns:ItemAlias>
        </ns:Alias>
        <ns:Alias>
          <ns:Item>Sect 2 Dis Press</ns:Item>
          <ns:ItemAlias>HT Dis Press</ns:ItemAlias>
        </ns:Alias>
      </ns:Aliases>
    </ns:SetItemAliases>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
SetItemAliasResult	Returns a boolean value of either 'true' or 'false' depending if the action was successful or not.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <SetItemAliasesResponse xmlns="http://www.resourcedm.com/RDMServices/2018/01/05/">
      <SetItemAliasResult>true</SetItemAliasResult>
      <SetItemAliasResult>true</SetItemAliasResult>
    </SetItemAliasesResponse>
  </soap:Body>
</soap:Envelope>
```

SetItemVisibility

This function will set a devices specific item(s) visibility.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2022/03/28/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName?></ns:UserName>
      <ns:Password?></ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetItemVisibility>
      <ns:Device?></ns:Device>
      <ns:VisibilityElements>
        <!--Zero or more repetitions-->
        <ns:ItemVisibilityGPChannel>
          <ns:Name?></ns:Name>
          <ns:Visibility?></ns:Visibility>
        </ns:ItemVisibilityGPChannel>
      </ns:VisibilityElements>
    </ns:SetItemVisibility>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
UserName	Text string of the user's name to access device.
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.
Device	Text string of the device's ID/ name.
Item	Text string of the device's Item.
Visibility	Text string of the visibility level which the item is to be given; "All", "Site", "Service", "Install", "Hide".

:- Multiple items can be set on the one device within the same Webservices request.

Example

On device 'PLANT1' change the visibility level on 'Alarm Input' from 'All' to 'Hide' using user name/ password, install/ 1234;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2022/03/28/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns:Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetItemVisibility>
      <ns:Device>PLANT1</ns:Device>
      <ns:VisibilityElements>
        <!--Zero or more repetitions-->
        <ns:ItemVisibilityGPChannel>
          <ns:Name>Alarm Input</ns:Name>
          <ns:Visibility>Hide</ns:Visibility>
        </ns:ItemVisibilityGPChannel>
      </ns:VisibilityElements>
    </ns:SetItemVisibility>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
SetItemVisibility	Returns a boolean value of either 'true' or 'false' depending if the action was successful or not.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <SetItemVisibilityResponse xmlns="http://www.resourcedm.com/RDMServices/2022/03/28/">
      <SetItemVisibilityResult>true</SetItemVisibilityResult>
    </SetItemVisibilityResponse>
  </soap:Body>
</soap:Envelope>
```

SetSystemLockout

This function sets the access level of the System Lockout feature.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2022/03/28/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName?</ns:UserName>
      <ns>Password?</ns>Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetSystemLockout>
      <ns:SystemLockout?</ns:SystemLockout>
    </ns:SetSystemLockout>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
UserName	Text string of the user’s name to access device.
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.
Sytem Lockout	Text string of the System Lockout level to be set; "Normal", "Site", "Service", "Install"

Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMServices/2022/03/28/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns>Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns>Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetSystemLockout>
      <ns:SystemLockout>Install</ns:SystemLockout>
    </ns:SetSystemLockout>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
SetSystemLockout	Returns a boolean value of either 'true' or 'false' depending if the action was successful or not.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <SetSystemLockoutResponse xmlns="http://www.resourcedm.com/RDMServices/2022/03/28/">
      <SetSystemLockoutResult>
        <SystemLockout>true</SystemLockout>
      </SetSystemLockoutResult>
    </SetSystemLockoutResponse>
  </soap:Body>
</soap:Envelope>
```

Intuitive & Mini Intuitive TDB (PR06XX-TDB) Web Services Call & Functions

The URL to get information on what is implemented on an Intuitive TDB device is below;

<http://10.255.255.254/cgi-bin/cgi.cgi?WSDL>

The above is the static IP address when accessing the device via USB. If accessing it through the Ethernet port, replace the above IP with the designated IP address of the port.

This details all the functions currently available and the parameters they require, there is also basic documentation on the service.

Outlined below are the functions available for the Intuitive TDB.

Command	Description
Cancel Slave	Cancels the timed parameters command to the parameters specified.
GetAlarmList	Get a copy of the current controller Alarm log.
GetGPTimerChannel	Shows the current schedule operating in any single GP timer channel.
GetGPTimerChannels	Shows the current state of all GP timer channels.
GetLogDataInline	Get a block of historical data for all inputs and outputs listed in control summary page.
GetLogItem	Request log data for a single point in the Intuitive/Plant TDB controller. A single point being an Input or Output in the control Summary page.
GetLogItemInLine	Get a block of historical data for a single IO point in the controller
GetSlave	Get a list of the values currently shown in the control summary page. (Inputs/outputs to the TDB program)
GetSyslog	Get a copy of the current System log.
GetTDBInfo	Get information relating to the TDB program e.g., name, number of blocks etc
GetVersion	Find out the application Software Version running in the Plant controller.
SetGPTimerChannel	Edit/set a schedule in a specified GP timer channel.
SetSlave	Set/change Setting block values (Parameters).

Detailed descriptions and some basic examples are outlined in the subsequent sections.

Some of the above features require the user to authenticate the webservices request with the Intuitive TDB to make a connection. This username and password can be added through the Initiative's webpages i.e., it is the same username/password which is used to access the service menus. Note the password is encoded using SHA-1 hash, the username is plain text. Please see the [password section](#) for more details.

Anything that supports Web Services can be used to access the Intuitive TDB interface.

Disclaimer

The specifications of the product detailed in this document may change without notice. RDM Ltd shall not be liable for errors or omissions, for incidental or consequential damages, directly or indirectly, in connection with the furnishing, performance or misuse of this product or document.

WARNING:

Please be aware that improper use of the Web Services functions can cause damage to the equipment. For example, if too many writes are attempted in a short space of time or if large amounts of data are sent at once this can flood the system. Furthermore, as with any device using flash memory, writes are to be restricted to less than 5 per day, any more could result in damaged flash memory and void the warranty on the device.

CancelSlave

This function cancels the given controllers Timed parameters to the values specified.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMPlantTDB/2022/04/07/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName?</ns:UserName>
      <ns>Password?</ns>Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:CancelSlave>
      <ns:Cancels>
        <!--1 or more repetitions:-->
        <ns:Cancel>
          <ns:Name?</ns:Name>
        </ns:Cancel>
      </ns:Cancels>
    </ns:CancelSlave>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
UserName	Text string of the user name to access device.
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.
Name	Text string of the parameter name that is to have its timed parameter cancelled.

Note: Multiple timed parameters can be cancelled within the one Webservices request

Example

Cancelling the timed parameter on First Floor Sales AC Heat Setpoint parameter.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMPlantTDB/2022/04/07/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns>Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns>Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:CancelSlave>
      <ns:Cancels>
        <!--1 or more repetitions:-->
        <ns:Cancel>
          <ns:Name>First Floor Sales AC Heat Setpoint</ns:Name>
        </ns:Cancel>
      </ns:Cancels>
    </ns:CancelSlave>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
CancelSlave	Returns a boolean value of either 'true' or 'false' depending if the action was successful or not.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <CancelSlaveResponse xmlns="http://www.resourcedm.com/RDMPlantTDB/2022/04/07/">
      <CancelSlaveResult>true</CancelSlaveResult>
    </CancelSlaveResponse>
  </soap:Body>
</soap:Envelope>
```

GetAlarmList

Obtains an alarm list stored within the device bounded by stated parameters.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetAlarmList>
      <ns:Number?></ns:Number>
      <ns:StartTime?></ns:StartTime>
    </ns:GetAlarmList>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Number	A positive integer ranging from 1 – X. where X is only bound by the number of alarms the device can hold i.e., device storage. This is the number of alarm entries the function will extract.
Start Time	Represented in the ISO8601 format this is the time and date for which the alarm list extracted, will start from. Ie. Only lists the alarms which occurred before this time.

Example

Requesting the first two alarms occurring on or after 13:00 hrs GMT on the 22nd July 2016;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetAlarmList>
      <ns:Number>2</ns:Number>
      <ns:StartTime>2016-07-22T13:00:00Z</ns:StartTime>
    </ns:GetAlarmList>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
Serial	The unique identifier of the alarm.
Text	The text string associated to the alarm.
Occurred	The time the alarm occurred in the ISO8601 format .
Cleared	The time the alarm cleared in the ISO8601 format .

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetAlarmListResponse xmlns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
      <GetAlarmListResult>
        <Alarm>
          <Alarm>
            <Serial>2</Serial>
            <Text>Device Alarm</Text>
            <Occurred>2016-07-22T12:25:56+01:00</Occurred>
            <Cleared>2016-07-22T12:26:08+01:00</Cleared>
          </Alarm>
        <Alarm>
          <Serial>1</Serial>
          <Text>Device Alarm</Text>
          <Occurred>2016-07-22T12:25:24+01:00</Occurred>
        </Alarm>
      </GetAlarmListResult>
    </GetAlarmListResponse>
  </soap:Body>
</soap:Envelope>
```

```
<Cleared>2016-07-22T12:25:46+01:00</Cleared>  
</Alarm>  
</GetAlarmListResult>  
</GetAlarmListResponse>  
</soap:Body>  
</soap:Envelope>
```

GetGPTimerChannel

Returns the current schedule of the specified GP Timer Channel. The intuitive TDB controller has 40 available channels.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetGPTimerChannel>
      <ns:Index>?</ns:Index>
    </ns:GetGPTimerChannel>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Index	A positive integer ranging between; 1 and 100. This specifies the GP Timer channel the function will interrogate.

Example

Requesting the details of GP Timer channel 4.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetGPTimerChannel>
      <ns:Index>4</ns:Index>
    </ns:GetGPTimerChannel>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
Index	A positive integer of the GP Channel Number between 1 and 100.
Type	A text string of the type, the GP Channel is set to; "Master" or "Slave".
Name	A text string of the GP channel's description.
MasterChannel	If GP Timer channel is of type 'Master', this will be returned as a '0'. Else, if set to a 'Slave', the slave's master channel will be returned i.e., a positive integer between 1 and 100.
GPEvent - Type	A text string of the 'GP Event's' Type; "Unused", "Day", "Week", "Year", "Once" or "Slave". If channel is set as a 'slave', this will return 'Slave'.
GPEvent - DayMask	A positive integer between 1 and 64; 1: Sunday 2: Monday 4: Tuesday 8: Wednesday 16: Thursday 32: Friday 64: Saturday If unused, will return 0.
GPEvent - Day	A positive integer between 1 and 31. Represents a date. If unused will return 0.
GPEvent - Month	A positive integer between 1 and 12. Represents a month. If unused will return 0.
GPEvent - Year	A positive integer between 1 and 9999. Represents a year. If unused will return 0.
GPEvent - OnTime1	A positive or negative integer between -720 and +1440. Time in minutes. If unused will return 0.
GPEvent - OffTime1	A positive or negative integer between -720 and +1440. Time in minutes. If unused will return 0.
GPEvent - OnTime2	A positive or negative integer between -720 and +1440. Time in minutes. If unused will return 0.

GPEvent - OffTime2	A positive or negative integer between -720 and +1440. Time in minutes. If unused will return 0.
--------------------	--

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetGPTimerChannelResponse xmlns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
      <GetGPTimerChannelResult>
        <Index>4</Index>
        <Type>Master</Type>
        <Name>GP Timer Channel 4</Name>
        <MasterChannel>0</MasterChannel>
        <Events>
          <GPEvent>
            <Type>Once</Type>
            <DayMask>0</DayMask>
            <Day>22</Day>
            <Month>7</Month>
            <Year>2016</Year>
            <OnTime1>360</OnTime1>
            <OffTime1>900</OffTime1>
            <OnTime2>0</OnTime2>
            <OffTime2>0</OffTime2>
          </GPEvent>
        </Events>
      </GetGPTimerChannelResult>
    </GetGPTimerChannelResponse>
  </soap:Body>
</soap:Envelope>
```

GetGPTimerChannels

Returns the current statuses of all GP Timer Channels.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetGPTimerChannels/>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
N/A	

Example

Request state of all GP Timer Channels. Example as above.

Returns

The function will return;

Fields	Details
Index	A positive integer of the GP Channel Number between 1 and 100.
Name	A text string of the GP channel's description.
Status	A text string of the GP channel's current state; returns either 'true' or 'false'.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetGPTimerChannelsResponse xmlns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
      <GetGPTimerChannelsResult>
        <GPChannel>
          <Index>1</Index>
          <Name>GP Timer Channel 1</Name>
          <Status>true</Status>
        </GPChannel>
        <GPChannel>
          <Index>2</Index>
          <Name>GP Timer Channel 2</Name>
          <Status>true</Status>
        </GPChannel>
        <GPChannel>
          <Index>3</Index>
          <Name>GP Timer Channel 3</Name>
          <Status>>false</Status>
        </GPChannel>
        :
        :
        :
        <Index>40</Index>
        <Name>Global GP Channel 8</Name>
        <Status>>false</Status>
      </GPChannel>
    </GetGPTimerChannelsResult>
  </GetGPTimerChannelsResponse>
</soap:Body>
</soap:Envelope>
```

GetLogDataInline

Get a block of historical data for the inputs listed in the control summary page of the device.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetLogDataInline>
      <ns:ResponseType?</ns:ResponseType>
      <ns:Step?</ns:Step>
      <ns:Start?</ns:Start>
      <ns:End?</ns:End>
    </ns:GetLogDataInline>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
ResponseType	Define the type the data the function will return. Can be either "Csv" or "Xml"
Step	Positive integer defining the frequency of extracted points in seconds. NB - With a memory stick connected to the device, it logs at 15second intervals. Without, 900 seconds.
Start	The time in ISO8601 format the block of data will begin from
End	The time in ISO8601 format the block of data will end at.

Example

Request log of values between 14:00 and 15:00 GMT on 22nd July 2016 with 15-minute intervals in Xml format;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetLogDataInline>
      <ns:ResponseType>Xml</ns:ResponseType>
      <ns:Step>900</ns:Step>
      <ns:Start>2016-07-22T14:00:00Z</ns:Start>
      <ns:End>2016-07-22T15:00:00Z</ns:End>
    </ns:GetLogDataInline>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
Step	Confirms requested step of request.
Start	Confirms requested start time in the ISO8601 format of request.
End	Confirms requested end time in the ISO8601 format of request.
LogData	Data in the format requested

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetLogDataResponse xmlns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
      <GetLogDataResult>
        <Step>900</Step>
        <Start>2016-07-22T15:00:00+01:00</Start>
        <End>2016-07-22T16:00:00+01:00</End>
        <LogData><![CDATA[<?xml version="1.0" encoding="UTF-8" ?>
<Data>
```

```
<Fields>
<Field>Digital Input 1</Field>
<Field>Digital Input 2</Field>
<Field>Analog Input 1</Field>
<Field>Analog Input 2</Field>
<Field>Digital Output 1</Field>
<Field>Digital Output 2</Field>
</Fields>
<Entries>
<Entry>
<Time>2016-07-22T15:00:00+01:00</Time>
<Values>
<Value>On</Value>
<Value>On</Value>
<Value>-0.6</Value>
<Value>0.2</Value>
<Value>Off</Value>
<Value>Off</Value>
</Values>
</Entry>
<Entry>
<Time>2016-07-22T15:15:00+01:00</Time>
<Values>
<Value>On</Value>
<Value>On</Value>
<Value>-0.2</Value>
<Value>1.3</Value>
<Value>Off</Value>
<Value>Off</Value>
</Values>
</Entry>
<Entry>
<Time>2016-07-22T15:30:00+01:00</Time>
<Values>
<Value>On</Value>
<Value>On</Value>
<Value>-0.9</Value>
<Value>0.4</Value>
<Value>On</Value>
<Value>Off</Value>
</Values>
</Entry>
</Entries>
</Data>]]</LogData>
  </GetLogDataResult>
</GetLogDataResponse>
</soap:Body>
</soap:Envelope>
```

GetLogItem

Request for the value of a specific point in the Intuitive/Plant TDB controller at a specific time. A single point being an Input or Output in the control Summary page.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetLogItem>
      <ns:GetLogItem>
        <ns:Name>?</ns:Name>
        <ns:StartTime>?</ns:StartTime>
      </ns:GetLogItem>
    </ns:GetLogItem>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Name	A text string of the IO point. Note, this must match the name exactly.
StartTime	Represented in the ISO8601 format this is the time and date for the value to be read.

Note: When using the time format the seconds must be in increments of 15 (e.g., 00, 15, 30 & 45)

Example

Request value of point "Analog Input 1" at 13:00 GMT on 22nd July 2016.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetLogItem>
      <ns:GetLogItem>
        <ns:Name>Analog Input 1</ns:Name>
        <ns:StartTime>2016-07-22T13:00:00Z</ns:StartTime>
      </ns:GetLogItem>
    </ns:GetLogItem>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
LogItemResult	Type of data returned will depend on the IO point being read, e.g., text string, signed integer etc.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <LogItemResponse xmlns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
      <LogItemResult>-0.6</LogItemResult>
    </LogItemResponse>
  </soap:Body>
</soap:Envelope>
```

GetLogItemInLine

Obtains a block of historical data for a single IO point in the controller.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetLogItemInLine>
      <ns:ResponseType?</ns:ResponseType>
      <ns:Item?</ns:Item>
      <ns:Step?</ns:Step>
      <ns:Start?</ns:Start>
      <ns:End?</ns:End>
    </ns:GetLogItemInLine>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
ResponseType	Define the type the data the function will return. Can be either "Csv" or "Xml"
Item	A text string of the IO point. Note, this must match the name exactly.
Step	Positive integer defining the frequency of extracted points in seconds. NB - With a memory stick connected to the device, it logs at 15second intervals. Without, 900 seconds.
Start	The time in ISO8601 format the block of data will begin from
End	The time in ISO8601 format the block of data will end at.

Note: When using the time format the seconds must be in increments of 15 (e.g., 00, 15, 30 & 45)

Example

Request the log of values taken from the IO point "Analog Input 1" between 14:00 and 15:00 GMT on 22nd July 2016 with 5 minute intervals in Csv format;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetLogItemInLine>
      <ns:ResponseType>Csv</ns:ResponseType>
      <ns:Item>Analog Input 1</ns:Item>
      <ns:Step>300</ns:Step>
      <ns:Start>2016-07-22T14:00:00Z</ns:Start>
      <ns:End>2016-07-22T15:00:00Z</ns:End>
    </ns:GetLogItemInLine>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
Item	Confirms the Item text string requested
Step	Confirms requested step of request.
Start	Confirms requested start time in the ISO8601 format of request.
End	Confirms requested end time in the ISO8601 format of request.
LogItem	Data in the format requested

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetLogItemResponse xmlns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
      <GetLogItemResult>
        <Item>Analog Input 1</Item>
        <Step>300</Step>
        <Start>2016-07-22T15:00:00+01:00</Start>
        <End>2016-07-22T16:00:00+01:00</End>
        <LogItem>2016-07-22T15:00:00+01:00,-0.6
2016-07-22T15:05:00+01:00,-0.2
2016-07-22T15:10:00+01:00,-0.9
2016-07-22T15:15:00+01:00,-0.6
2016-07-22T15:20:00+01:00,-0.3
2016-07-22T15:25:00+01:00,-0.5
2016-07-22T15:30:00+01:00,-0.6</LogItem>
      </GetLogItemResult>
    </GetLogItemResponse>
  </soap:Body>
</soap:Envelope>
```

GetSlave

Returns a list of all current values for all IO points listed in the Control Summary page.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetSlave/>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
N/A	

Example

Request values of all IO points at current time. Example as above.

Returns

The function will return;

Fields	Details
Description	Text string of TDB’s description, found within plc settings.
Item - Class	A text string of either; "Input", "Output", "Parameter", "State".
Item - Name	A text string of the IO’s name
Item - Value	Type of data returned will depend on the IO point being read, e.g., text string, signed integer etc.
Item - Unit	A text string of the IO’s unit.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetSlaveListResponse xmlns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
      <GetSlaveResult>
        <Description>PLC Program</Description>
        <Items>
          <Item>
            <Class>Input</Class>
            <Name>Digital Input 1</Name>
            <Value>On</Value>
            <Units>None</Units>
          </Item>
          <Item>
            <Class>Input</Class>
            <Name>Digital Input 2</Name>
            <Value>On</Value>
            <Units>None</Units>
          </Item>
          <Item>
            <Class>Input</Class>
            <Name>Analog Input 1</Name>
            <Value>-0.6</Value>
            <Units>None</Units>
          </Item>
          <Item>
            <Class>Input</Class>
            <Name>Analog Input 2</Name>
            <Value>0.2</Value>
            <Units>None</Units>
          </Item>
        </Items>
      </GetSlaveResult>
    </GetSlaveListResponse>
  </soap:Body>
</soap:Envelope>
```

```
<Class>Output</Class>
<Name>Digital Output 1</Name>
<Value>Off</Value>
<Units>None</Units>
</Item>
<Item>
  <Class>Output</Class>
  <Name>Digital Output 2</Name>
  <Value>Off</Value>
  <Units>None</Units>
</Item>
<Item>
  <Class>Parameter</Class>
  <Name>Alarm Delay</Name>
  <Value>0.0</Value>
  <Units>min:sec</Units>
  <Detail>
    <Type>Time</Type>
    <Min>0.0</Min>
    <Max>199999999.0</Max>
    <Step>00:01</Step>
  </Detail>
</Item>
</Items>
</GetSlaveResult>
</GetSlaveListResponse>
</soap:Body>
</soap:Envelope>
```

GetSyslog

Returns a copy of the current system log, defining the number of entries returned in the function.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName?</ns:UserName>
      <ns:Password?</ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:GetSyslog>
      <ns:Number?</ns:Number>
    </ns:GetSyslog>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Username	Text string of the user's name to access device
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.
Number	Positive Integer defining number of system log entries to be returned. Latest Entry first.

Example

Return 5 system log entries, using the username/ password – install / 1234;

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns:Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:GetSyslog>
      <ns:Number>5</ns:Number>
    </ns:GetSyslog>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
Event - Time	Time of entry in the ISO8601 format .
Event - Text	Text string of the system log entry.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetSyslogResponse xmlns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
      <GetSyslogResult>
        <Event>
          <Time>2016-07-22T14:58:22+01:00</Time>
          <Text>GP timer channel 4 settings changed</Text>
        </Event>
      </GetSyslogResult>
    </GetSyslogResponse>
  </soap:Body>
```

```
<Time>2016-07-22T15:02:15+01:00</Time>
  <Text>GP timer channel 2 settings changed</Text>
</Event>
<Event>
  <Time>2016-07-22T15:02:58+01:00</Time>
  <Text>GP timer channel 3 settings changed</Text>
</Event>
<Event>
  <Time>2016-07-22T15:07:21+01:00</Time>
  <Text>GP timer channel 4 settings changed</Text>
</Event>
<Event>
  <Time>2016-07-22T15:09:59+01:00</Time>
  <Text>GP timer channel 4 settings changed</Text>
</Event>
</GetSyslogResult>
</GetSyslogResponse>
</soap:Body>
</soap:Envelope>
```

GetTDBInfo

Returns details relating to the TDB program, including name & number of blocks etc.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetTDBInfo/>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
N/A	

Example

Return all data of TDB program. Example as above.

Returns

The function will return;

Fields	Details
Description	Text string of the TDB's description.
BlockCount	Positive integer of total number of blocks used within program
ModificationDate	Time and date of last update made to the TDB in the ISO8601 format .
FileSize	Positive integer detailing the space taken by the TDB on the device. Note: not file size when downloaded.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetTDBInfoResponse xmlns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
      <GetTDBInfoResult>
        <Description>PLC Program</Description>
        <BlockCount>45</BlockCount>
        <ModificationDate>2016-07-22T12:25:13+01:00</ModificationDate>
        <FileSize>1577</FileSize>
      </GetTDBInfoResult>
    </GetTDBInfoResponse>
  </soap:Body>
</soap:Envelope>
```

GetVersion

Returns the application software version running on the Intuitive / Plant TDB.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
  <soapenv:Header/>
  <soapenv:Body>
    <ns:GetVersion/>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
N/A	

Example

Return application software version on device. Example as above.

Returns

The function will return;

Fields	Details
Version	Text String of application software.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <GetVersionResponse xmlns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
      <GetVersionResult>
        <Version>TDB Intuitive Controller V3.1.0</Version>
        <SiteName/>
      </GetVersionResult>
    </GetVersionResponse>
  </soap:Body>
</soap:Envelope>
```

OverrideGPTimerChannel

Sets run-on for a GP timer channel to the given period.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMPlantTDB/2022/04/07/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName?</ns:UserName>
      <ns:Password?</ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:OverrideGPTimerChannel>
      <ns:Index?</ns:Index>
      <ns:Duration?</ns:Duration>
    </ns:OverrideGPTimerChannel>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Username	Text string of the user name to access device
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.
Index	A positive integer of the GP Channel Number between 1 and 100.
Duration	A positive integer of the length of time the channel is to be run-on for. This is in minutes

Note: Run on time limit is set under the site setup page

Example

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMPlantTDB/2022/04/07/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns:Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns:Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:OverrideGPTimerChannel>
      <ns:Index>1</ns:Index>
      <ns:Duration>30</ns:Duration>
    </ns:OverrideGPTimerChannel>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
OverrideGPTimerChannel	Returns a boolean value of either 'true' or 'false' depending if the action was successful or not.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <OverrideGPTimerChannelResponse xmlns="http://www.resourcedm.com/RDMPlantTDB/2022/04/07/">
      <OverrideGPTimerChannelResult>true</OverrideGPTimerChannelResult>
    </OverrideGPTimerChannelResponse>
  </soap:Body>
```

```
</soap:Envelope>
```

SetGPTimerChannel

Edit and or set a specific GP Timer channel.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName?</ns:UserName>
      <ns>Password?</ns>Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetGPTimerChannel>
      <ns:Index?</ns:Index>
      <ns:Type?</ns:Type>
      <ns:Name?</ns:Name>
      <ns:MasterChannel?</ns:MasterChannel>
      <ns:Events>
        <!--1 or more repetitions:-->
        <ns:GPEvent>
          <ns:Type?</ns:Type>
          <ns:DayMask?</ns:DayMask>
          <ns:Day?</ns:Day>
          <ns:Month?</ns:Month>
          <ns:Year?</ns:Year>
          <ns:OnTime1?</ns:OnTime1>
          <ns:OffTime1?</ns:OffTime1>
          <ns:OnTime2?</ns:OnTime2>
          <ns:OffTime2?</ns:OffTime2>
        </ns:GPEvent>
      </ns:Events>
    </ns:SetGPTimerChannel>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Username	Text string of the user name to access device
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.
Index	A positive integer of the GP Channel Number between 1 and 100.
Type	A text string of the type, the GP Channel is to be; "Master" or "Slave".
Name	A text string of the GP channel's description.
MasterChannel	If the GP Timer channel is to be of type 'Master', set to '0'. Else, if it is set to a 'Slave', the slave's master channel is to be entered. To be a positive integer between 1 and 100.
GPEvent - Type	A text string of the 'GP Event's' Type; "Unused", "Day", "Week", "Year", "Once" or "Slave". If channel is to be set as a type 'slave', input 'Slave'.
GPEvent - DayMask	A positive integer between 1 and 64; 1: Sunday 2: Monday 4: Tuesday 8: Wednesday 16: Thursday 32: Friday 64: Saturday If unused, enter '0'.
GPEvent - Day	A positive integer between 1 and 31. Represents a date. If unused enter '0'.
GPEvent - Month	A positive integer between 1 and 12. Represents a month. If unused enter '0'.
GPEvent - Year	A positive integer between 1 and 9999. Represents a year. If unused enter '0'.
GPEvent - OnTime1	A positive or negative integer between -720 and +1440. Time in minutes. If unused enter '0'.
GPEvent - OffTime1	A positive or negative integer between -720 and +1440. Time in minutes If unused enter '0'.

GPEvent - OnTime2	A positive or negative integer between -720 and +1440. Time in minutes. If unused enter '0'.
GPEvent - OffTime2	A positive or negative integer between -720 and +1440. Time in minutes. If unused enter '0'.

Example

Set the GP Timer Channel 1, to have a one-time schedule of 06:00 – 09:00 for 22nd July 2016 using username/password install/ 1234.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns>Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns>Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetGPTimerChannel>
      <ns:Index>1</ns:Index>
      <ns>Type>Master</ns>Type>
      <ns>Name>Lighting Timer</ns>Name>
      <ns:MasterChannel>0</ns:MasterChannel>
      <ns:Events>
        <!--1 or more repetitions:-->
        <ns:GPEvent>
          <ns>Type>Once</ns>Type>
          <ns:DayMask>0</ns:DayMask>
          <ns:Day>22</ns:Day>
          <ns:Month>7</ns:Month>
          <ns:Year>2016</ns:Year>
          <ns:OnTime1>360</ns:OnTime1>
          <ns:OffTime1>540</ns:OffTime1>
          <ns:OnTime2>0</ns:OnTime2>
          <ns:OffTime2>0</ns:OffTime2>
        </ns:GPEvent>
      </ns:Events>
    </ns:SetGPTimerChannel>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
SetGPTimerChannelResult	Returns a boolean value of either 'true' or 'false' depending if the action was successful or not.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <SetGPTimerChannelResponse xmlns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
      <SetGPTimerChannelResult>true</SetGPTimerChannelResult>
    </SetGPTimerChannelResponse>
  </soap:Body>
</soap:Envelope>
```

SetSlave

Used to set/ change setting block values within the parameter section of the TDB.

Function

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMPlantTDB/2022/04/07/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>?</ns:UserName>
      <ns>Password>?</ns>Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetSlave>
      <ns:Settings>
        <!--1 or more repetitions:-->
        <ns:Setting>
          <ns:Name>?</ns:Name>
          <ns:Value>?</ns:Value>
          <ns:Duration>?</ns:Duration>
        </ns:Setting>
      </ns:Settings>
    </ns:SetSlave>
  </soapenv:Body>
</soapenv:Envelope>
```

Fields

Fields	Details
Username	Text string of the user's name to access device
Password	Text string of the encoded password used in conjunction with the username to access device. Please see password section for more details.
Name	Text string of the parameter's description. Note: it must match the exact text string.
Value	Type of data will depend on the IO point being read, e.g., text string, signed integer etc.
Duration	Time period in minutes the parameter is to be set for.

Example

Set the parameter "Alarm Delay" to 2 minutes.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
  <soapenv:Header>
    <ns:UserCredentials>
      <ns:UserName>install</ns:UserName>
      <ns>Password>7110eda4d09e062aa5e4a390b0a572ac0d2c0220</ns>Password>
    </ns:UserCredentials>
  </soapenv:Header>
  <soapenv:Body>
    <ns:SetSlave>
      <ns:Settings>
        <ns:Setting>
          <ns:Name>Alarm Delay</ns:Name>
          <ns:Value>02:00</ns:Value>
          <ns:Duration>15</ns:Duration>
        </ns:Setting>
      </ns:Settings>
    </ns:SetSlave>
  </soapenv:Body>
</soapenv:Envelope>
```

Returns

The function will return;

Fields	Details
SetSlaveResult	Returns a boolean value of either 'true' or 'false' depending if the action was successful or not.

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <SetSlaveResponse xmlns="http://www.resourcedm.com/RDMPlantTDB/2009/03/13/">
      <SetSlaveResult>true</SetSlaveResult>
    </SetSlaveResponse>
  </soap:Body>
</soap:Envelope>
```

Testing

With both the Data Manager and the Intuitive TDB controller you can use software such as SOAP UI. Found from the link below;

<http://www.soapui.org/>

This software can be used to make requests to the Data Manager or Intuitive TDB to show the structure required. Within this software you have options to “point” the Soap UI software at the Data Manager or Intuitive TDB WSDL e.g., the <http://10.1.2.75/cgi-bin/cgi.cgi?WSDL> address. By doing this it will automatically generate and make sample requests for all the commands listed in the Data Manager or Intuitive TDB Web Services interface.

If you have any further questions regarding either Web Services interface, please contact the RDM Technical Support team.

Time Format

In some instances, the Web Services request requires a start time or both a start and end time. This must be entered using the ISO8601 standard.

YYYY-MM-DDThh:mm:ssZ

Where

YYYYY Is the year
MM Is the month
DD Is the day
hh Is the hours
mm is the minutes
ss is the seconds
Z Is the offset for the timezone the device is operating in.*

* If the time is in UTC, then enter a 'Z' directly after the time without a space. The 'Z' denotes a zero UTC offset i.e., no offset.

An example request without an offset is shown below;

2018-10-25T09:10:00Z

An example request with offset is shown below;

2018-10-25T09:10:00+01:00

Note: If using the time format for getting log data the seconds must be in increments of 15 (e.g., 00, 15, 30 & 45)

Passwords

When making certain Web Services requests authentication may be required e.g., requesting the system log. In this instance a valid username and the password for an account on the Data Manager or Intuitive TDB device is required. One thing to note is the password is not plain text. It is encoded using an encryption process called SHA-1 hash which takes the plain text and encrypts it. The username is still entered in plain text.

There are various websites online which will generate SHA-1 encoded passwords.

As an example: 1234 encoded using SHA-1 will be:

7110eda4d09e062aa5e4a390b0a572ac0d2c0220

Since '1234' will always be encrypted as the above anyone familiar with RDM equipment may try this should they wish to gain access to RDM equipment. As always, RDM recommend the end user remove the default password of '1234' and select a more secure password.

For the Data Manager there is an option on the 'Site Setup' page which allows the user to disable 'Authentication on Web Service'. When disabled the Data Manager does not require a valid username or password when receiving web service requests. Use with caution.

Disclaimer

The specifications of the product detailed in this document may change without notice. RDM Ltd shall not be liable for errors or omissions, for incidental or consequential damages, directly or indirectly, in connection with the furnishing, performance or misuse of this product or document.

WARNING:

Please be aware that improper use of the Web Services functions can cause damage to the equipment. For example, if too many writes are attempted in a short space of time or if large amounts of data are sent at once this can flood the system. Furthermore, as with any device using flash memory, writes are to be restricted to less than 5 per day, any more could result in damaged flash memory and void the warranty on the device.

Revision History

Revision	Date	Changes
V2.0	22/08/2017	New look documentation, New Data Manager Enhanced Web Services added
V2.0a	14/12/2017	Updated disclaimer
V2.1	12/01/2018	Added functions to DM Enhanced web services; GetDevices, SetDeviceAlias, SetDeviceName, SetDevices and SetItemAliases
V2.1a	24/01/2018	Correction of URL example on pg33.
V2.1b	13/07/2018	Update to general Web Services description.
V2.1c	25/10/2018	Correction of time example.
V2.1d	08/04/2019	Update to Enhanced Web Services description, RDM USA office location updated.
V2.2	24/03/2020	Added functions to DM Enhanced web services; GetDeviceCPT, SetDevice and SetDeviceCPT
V2.3	03/02/2021	Added function for new Web Services version of AcceptAlarm.
V2.4	14/11/2023	Added SetSystemLockout, SetItemVisibility and GetItemVisibility functions on Data Manager Enhanced Web Services. Added OverrideGPTimerChannel and CancelSlave for Intuitive Web Services. Note added regarding using 15 second increments when getting log data.
V2.4a	24/10/2025	Update added to the Set Slave on the Intuitive TDB to include Duration.

Group Offices

RDM Group Head Office

80 Johnstone Avenue
Hillington Industrial Estate
Glasgow
G52 4NZ
United Kingdom
+44 (0)141 810 2828
support@resourcedm.com

RDM USA

9441 Science Center Drive
New Hope
Minneapolis
MN 55428
United States
+1 612 354 3923
usasupport@resourcedm.com

RDM Asia

Sky Park at One City
Jalan USJ 25/1
47650 Subang Jaya
Selangor
Malaysia
+603 5022 3188
asiatech@resourcedm.com



Visit www.resourcedm.com/support for more information on RDM solutions, additional product documentation and software downloads.

While every effort is made to ensure the information given within this document is accurate, Resource Data Management Ltd shall not be liable for errors or omissions, for incidental or consequential damages, directly or indirectly, in connection with the furnishing, performance or misuse of this product or document. All specifications are subject to change without notice. See www.resourcedm.com for terms and conditions of sales.