HRS Integration Platform 3rd Party API Services

The HRS Integration platform provides 3rd party programmer / software integration through TCP Socket and UDP Datagram packets.

Revision 1.0.1

Default Ports

1. TCP : 500
2. UDP : 499

Command Format

All commands must be of valid JSON format and appended with a Carriage Return and Line Feed (\r\n, HEX 0D 0A). See: http://json.org/

Required Fields

service	command

Simple Raw String Example

```
{"service":"Enterprise", "command":"ExecuteMacro"}\r\n
```

Javascript Code Example

```
JSON.stringify({service: "Enterprise", command: "ExecuteMacro"}) + "\r\n";
```

Standard Response Fields

service	command	success	error	data

Enterprise Service Commands

Required Fields

service	command	system

Arguments

	Name	Type	Description
	system	String	Name of the System and the number. System1, System2, ... or the actual system name can be used (ie.. Floor 1, Building 1).

Response Fields

service	command	system	success	error	data

Commands

	command	Description	Additional Required Fields
1.00	ExecuteMacro	Executes a macro.	name
1.01	ExecuteLogic	Executes a logic routine.	name
1.02	ExecuteCodeLogic	Executes a javascript code logic routine.	name
1.10	SendDeviceResponse	Sends a Buffer Stream to a Device.	id	data
1.20	GetDeviceId	Gets a Device Id for a Device in the system.	name
1.30	GetMacros	Returns an array of macros.	
1.31	GetDevices	Returns an array of a systems devices.	
1.32	GetDeviceList	Returns an array of a device list.	listName	deviceName
2.00	GetVariable	Gets a Global Variable Value.	name
2.01	GetDeviceVariableByDeviceId	Gets a Device Variable Value.	name	id
2.02	GetDeviceVariableByDeviceName	Gets a Device Variable Value.	name	
2.10	SetVariable	Sets a Global Variable Value.	name	value
2.11	SetDeviceVariable	Sets a Device Variable Value.	name	value	deviceName
3.00	EnableDisableSchedule	Enables or Disables a recurring schedule.	name	enabled
3.01	EnableDisableScheduleDay	Enables or Disables a recurring schedule by day.	name	enabled	day
3.02	ChangeScheduleEventTime	Changes a recurring schedule event time.	name	eventName	hour	minute	second
3.03	OverrideSchedule	Create an Override to a recurring schedule.	name	year	month	day	enabled
3.04	RemoveOverrideSchedule	Deletes an Override to a recurring schedule.	name	year	month	day
3.05	AddCalendarSchedule	Adds a single macro schedule to the calendar.	macroName	year	month	day	hour	minute	second
3.06	RemoveCalendarSchedule	Removes a single macro schedule from the calendar.	macroName	year	month	day	hour	minute	second
3.10	GetRecurringSchedules	Returns an array of the recurring schedules.	
3.11	GetMacroSchedules	Returns an array of the macro schedules within the calendar.	
3.12	GetOverrideSchedules	Returns an array of the schedule overrides within the calendar.	
3.13	GetCurrentSchedule	Returns an array of the current scheduled macros that are to be executed for the rest of the day.	
3.14	GetDaySchedule	Returns an array of all macros to be executed for a specific date.	year	month	day	

1.00 ExecuteMacro

Executes a system macro by name.

Arguments

	Name	Type	Description
	name	String	Name of the Macro to execute.

API Sample

```
{"service":"Enterprise","system":"System1","command":"ExecuteMacro","name":"Macro1"}\r\n
```

Response

```
{"service":"Enterprise","system":"System1","command":"ExecuteMacro","success":"true", "error":"", "data":"","name":"Macro1"}\r\n
```

1.01 ExecuteLogic

Executes a system logic object by name.

Arguments

	Name	Type	Description
	name	String	Name of the Logic Object to execute.

API Sample

```
{"service":"Enterprise","system":"System2","command":"ExecuteLogic","name":"Logic1"}\r\n
```

Response

```
{"service":"Enterprise","system":"System1","command":"ExecuteLogic","success":"true", "error":"", "data":"", "name":"Logic1"}\r\n
```

1.02 ExecuteCodeLogic

Executes a system javascript logic object by name.

Arguments

	Name	Type	Description
	name	String	Name of the Javascript Method to execute.

API Sample

```
{"service":"Enterprise","system":"System2","command":"ExecuteCodeLogic","name":"runMe"}\r\n
```

Response

```
{"service":"Enterprise","system":"System1","command":"ExecuteCodeLogic","success":"true", "error":"", "data":"", "name":"runMe"}\r
```

1.10 SendDeviceResponse

Send a Buffer (Array of Bytes) to a system device.

Arguments

	Name	Type	Description
	id	String	Device Id (guid) of the device.
	data	String	A utf-8 string of data to be sent to a device. It must be encoded to base64.

Required Dependency

A Device Id (guid) must be obtained first to be used as the id parameter see 1.5 GetDeviceId or 1.19 GetDevices to get a Device Id

The data parameter must be a base 64 encoded string.

API Sample

```
{"service":"Enterprise","system":"System2","command":"SendDeviceResponse","id":"3B8C8994-59C4-44C0-A689-3E190997CCFA", "data"}\r\n
```

Response

```
{"service":"Enterprise","system":"System1","command":"SendDeviceResponse","success":"true", "error":"", "data":"", "id":"3B8C8994-
```

1.20 GetDeviceId

Returns a Device Id for a Device by name.

Arguments

	Name	Type	Description
	name	String	Name of the Device.

API Sample

```
{"service":"Enterprise","system":"System1","command":"GetDeviceId","name":"Projector 1"}\r\n
```

Response

```
{"service":"Enterprise","system":"System1","command":"GetDeviceId","success":"true", "error":"", "data":"3B8C8994-59C4-44C0-A689-3
```

1.30 GetMacros

Returns an array of macro objects.

API Sample

```
{"service":"Enterprise","system":"System1","command":"GetMacros"}\r\n
```

Response

```
{"service":"Enterprise","system":"System1","command":"GetMacros","success":"true", "error":"", "data":[{"id":"0F2C33E9-D44B-4EAB-B
```

1.31 GetDevices

Returns an array of device objects for a system.

Return Device object

	Name	Type	Description
	id	String	Id (guid) of the Device.
	name	String	Name of the Device.
	protocol	String	Protocol of the Device ie.. TCP, UDP, HTTP.
	settings	Array	Array of settings objects that describe things like IP Address, Port Number, and more.

Return Setting object

	Name	Type	Description
	name	String	Name of the Setting.
	value	String	Value of the Setting.

API Sample

```
{"service":"Enterprise","system":"System1","command":"GetDevices"}\r\n
```

Response

```
{"service":"Enterprise","system":"System1","command":"GetDevices","success":"true", "error":"", "data":[{}]}\r\n
```

1.32 GetDeviceList

Returns an array of a device list.

Arguments

	Name	Type	Description
	listName	String	The name of the list.
	deviceName	String	The name of the device.

Return List Items

	Name	Type	Description
	display	String	The display for the list item.
	value	String	The value for the list item.

API Sample

```
{"service":"Enterprise","system":"System1","command":"GetDeviceList"}\r\n
```

Response

```
{"service":"Enterprise","system":"System1","command":"GetDeviceList","success":"true", "error":"", "data":[{"display":"Clip1","val
```

2.00 GetVariable

Returns the Variable value by name.

Arguments

	Name	Type	Description
	name	String	Name of the Global Variable.

API Sample

```
{"service":"Enterprise","system":"System1","command":"GetVariable","name":"ProjectorHours"}\r\n
```

Response

```
{"service":"Enterprise","system":"System1","command":"GetVariable","success":"true", "error":"", "data":"1025", "name":"ProjectorH
```

2.01 GetDeviceVariableByDeviceId

Returns the Variable value by device id and name.

Arguments

	Name	Type	Description
	name	String	Name of the Internal Command Set Variable for a Device.
	id	String	Device Id (guid) of the device.

Required Dependency

A Device Id (guid) must be obtained first to be used as the id parameter see 1.5 GetDeviceId or 1.19 GetDevices to get a Device Id

API Sample

```
{"service":"Enterprise","system":"System1","command":"GetDeviceVariableByDeviceId","name":"ProjectorHours", "id":"3B8C8994-59C4-44
```

Response

```
{"service":"Enterprise","system":"System1","command":"GetDeviceVariableByDeviceId","success":"true", "error":"", "data":"1025", "n
```

2.02 GetDeviceVariableByDeviceName

Returns the Variable value by device name and variable name.

Arguments

	Name	Type	Description
	name	String	Name of the Internal Command Set Variable for a Device.
	deviceName	String	Name of the device.

API Sample

{"service":"Enterprise","system":"System1","command":"GetDeviceVariableByDeviceName","name":"PixelSpaceWidth", "deviceName":"Spyde

Response

{"service":"Enterprise","system":"System1","command":"GetDeviceVariableByDeviceName","success":"true", "error":"", "data":"1920",

2.10 SetVariable

Sets a global variable by name.

Arguments

	Name	Type	Description
	name	String	Name of the Variable to set.
	value	String	Value of the Variable to set.

API Sample

{"service":"Enterprise","system":"System1","command":"SetVariable","name":"Variable1", "value":"1234"}\r\n

Response

{"service":"Enterprise","system":"System1","command":"SetVariable","success":"true", "error":"", "data":"","name":"Variable1", "va

2.11 SetDeviceVariable

Sets a device variable by name.

Arguments

	Name	Type	Description
	deviceName	String	Name of the Device.
	name	String	Name of the Variable to set.
	value	String	Value of the Variable to set.

API Sample

{"service":"Enterprise","system":"System1","command":"SetVariable","deviceName":"Projector1""name":"LampHours", "value":"1000"}\r\

Response

{"service":"Enterprise","system":"System1","command":"SetVariable","success":"true", "error":"", "data":"","deviceName":"Projector

3.00 EnableDisableSchedule

Enables or Disables a recurring schedule.

Arguments

	Name	Type	Description
	name	String	Name of the Recurring Schedule.
	enabled	Boolean	Set to true to enable the recurring schedule. Set to false to disable it.

API Sample

```
{"service":"Enterprise","system":"System1","command":"EnableDisableSchedule","name":"Schedule1", "enabled":true}\r\n
```

Response

```
{"service":"Enterprise","system":"System1","command":"EnableDisableSchedule","success":"true", "error":"", "data":"", "name":"Sche
```

3.01 EnableDisableScheduleDay

Enables or Disables a recurring schedule by the day.

Arguments

	Name	Type	Description
	name	String	Name of the Recurring Schedule.
	enabled	Boolean	true will enable the recurring schedule, false will disable it.
	day	Number	The day of the week to enable or disable. Day 0 starts on Sunday.

API Sample

```
{"service":"Enterprise","system":"System1","command":"EnableDisableSchedule","name":"Schedule1", "enabled":true, "day": 1}\r\n
```

Response

```
{"service":"Enterprise","system":"System1","command":"EnableDisableSchedule","success":"true", "error":"", "data":"", "name":"Sche
```

3.02 ChangeScheduleEventTime

Change a Recurring Schedule Event Time to execute.

Arguments

	Name	Type	Description
	name	String	Name of the Recurring Schedule.
	eventName	String	Name of the Recurring Schedule Event.
	hour	Number	Hour of the event to change.
	minute	Number	Minute of the event to change.
	second	Number	Second of the event to change.

API Sample

{"service":"Enterprise","system":"System1","command":"ChangeScheduleEventTime","name":"Schedule1","eventName":"Event1", "hour":1,

Response

{"service":"Enterprise","system":"System1","command":"ChangeScheduleEventTime","success":"true", "error":"", "data":"", "name":"Sc

3.03 OverrideSchedule

Add an Override Calendar record for a Recurring Schedule.

Arguments

	Name	Type	Description
	name	String	Name of the Recurring Schedule.
	year	Number	Year the override should be created.
	month	Number	Month the override should be created. Month 1 is January.
	day	Number	Day the override should be created. Days start with 1.
	enabled	Boolean	Set to true to add an override on a non-recurring date. Set to false to disable a recurring schedule on a recurring date.

API Sample

{"service":"Enterprise","system":"System1","command":"OverrideSchedule","name":"Schedule1","year":"2015", "month":1, "day": 20, "e

Response

{"service":"Enterprise","system":"System1","command":"OverrideSchedule","success":"true", "error":"", "data":"", "name":"Schedule1

3.04 RemoveOverrideSchedule

Removes an Override Calendar record for a Recurring Schedule.

Arguments

	Name	Type	Description
	name	String	Name of the Recurring Schedule.
	year	Number	Year the override should be removed.
	month	Number	Month the override should be removed. Month 1 is January.
	day	Number	Day the override should be removed. Days start with 1.

API Sample

{"service":"Enterprise","system":"System1","command":"OverrideSchedule","name":"Schedule1","year":"2015", "month":1, "day": 20}\r\

Response

{"service":"Enterprise","system":"System1","command":"OverrideSchedule","success":"true", "error":"", "data":"", "name":"Schedule1

3.05 AddCalendarSchedule

Adds a one-time Calendar Macro Event.

Arguments

	Name	Type	Description
	macroName	String	Name of the Macro to run.
	year	Number	Year the macro event should be created.
	month	Number	Month the macro event should be created. Month 1 is January.
	day	Number	Day the macro event should be created. Days start with 1.
	hour	Number	Hour the macro event should be created. Hours start with 1.
	minute	Number	Minute the macro event should be created. Minutes start with 1.
	second	Number	Second the macro event should be created. Seconds start with 1.

API Sample

{"service":"Enterprise","system":"System1","command":"AddCalendarSchedule","macroName":"Macro1","year":"2015", "month":1, "day": 2

Response

{"service":"Enterprise","system":"System1","command":"AddCalendarSchedule","success":"true", "error":"", "data":"", "macroName":"M

3.06 RemoveCalendarSchedule

Adds a one-time Calendar Macro Event.

Arguments

	Name	Type	Description
	macroName	String	Name of the Macro.
	year	Number	Year the macro event should be removed.
	month	Number	Month the macro event should be removed. Month 1 is January.
	day	Number	Day the macro event should be removed. Days start with 1.
	hour	Number	Hour the macro event should be removed. Hours start with 1.
	minute	Number	Minute the macro event should be removed. Minutes start with 1.
	second	Number	Second the macro event should be removed. Seconds start with 1.

API Sample

```
{"service":"Enterprise","system":"System1","command":"RemoveCalendarSchedule","macroName":"Macro1","year":"2015", "month":1, "day"
```

Response

```
{"service":"Enterprise","system":"System1","command":"RemoveCalendarSchedule","success":"true", "error":"", "data":"", "macroName"
```

3.10 GetRecurringSchedules

Returns an array of recurring schedule objects.

Return schedule object

	Name	Type	Description
	id	String	Id (guid) of the Recurring Schedule.
	name	String	Name of the Recurring Schedule.
	scheduleEvents	Array	Array of Schedule Events.
	includeSunday	Boolean	Schedule is enabled/disabled on Sunday.
	includeMonday	Boolean	Schedule is enabled/disabled on Monday.
	includeTuesday	Boolean	Schedule is enabled/disabled on Tuesday.
	includeWednesday	Boolean	Schedule is enabled/disabled on Wednesday.
	includeThursday	Boolean	Schedule is enabled/disabled on Thursday.
	includeFriday	Boolean	Schedule is enabled/disabled on Friday.
	includeSaturday	Boolean	Schedule is enabled/disabled on Saturday.
	enabled	Boolean	Schedule is enabled or disabled.

Return scheduleEvent object

	Name	Type	Description
	Id	String	Id (guid) of the Schedule Event.
	Name	String	Name of the Schedule Event.
	Hour	Number	Hour of the Schedule Event.
	Minute	Number	Minute of the Schedule Event.
	Second	Number	Second of the Schedule Event.
	MacroId	String	Macro to be executed from the Schedule Event.
	YearMonthDay	String	Year-Month-Day of the Schedule Event to occur for one-time schedule.

API Sample

```
{"service":"Enterprise","system":"System1","command":"GetRecurringSchedules"}\r\n
```

Response

{"service":"Enterprise","system":"System1","command":"GetRecurringSchedules","success":"true", "error":"", "data":[{}]}\r\n

3.11 GetMacroSchedules

Returns an array of one-time Macro scheduled objects in the calendar.

Return schedule object

	Name	Type	Description
	id	String	Id (guid) of the Recurring Schedule.
	scheduleEvents	Array	Array of Schedule Events.

Return scheduleEvent object

	Name	Type	Description
	Id	String	Id (guid) of the Schedule Event.
	Name	String	Name of the Schedule Event.
	Hour	Number	Hour of the Schedule Event.
	Minute	Number	Minute of the Schedule Event.
	Second	Number	Second of the Schedule Event.
	MacroId	String	Macro to be executed from the Schedule Event.
	YearMonthDay	String	Year-Month-Day of the Schedule Event to occur for one-time schedule.

API Sample

{"service":"Enterprise","system":"System1","command":"GetMacroSchedules"}\r\n

Response

{"service":"Enterprise","system":"System1","command":"GetMacroSchedules","success":"true", "error":"", "data":[{}]}\r\n

3.12 GetOverrideSchedules

Returns an array of recurring schedule override objects.

Return Override object

	Name	Type	Description
	Id	String	Id (guid) of the Override.
	IncludeDate	Boolean	Indicates if the Override is to include the recurring schedule or exclude it.
	OverrideDate	String	Year-Month-Day of the Override.
	ScheduleId	String	Id (guid) of the Recurring Schedule Object.

API Sample

{"service":"Enterprise","system":"System1","command":"GetOverrideSchedules"}\r\n

Response

{"service":"Enterprise","system":"System1","command":"GetOverrideSchedules","success":"true", "error":"", "data":[{}]}\r\n

3.13 GetCurrentSchedule

Returns an array of current schedule objects that are to be executed for the rest of the day.

Return Schedule object

	Name	Type	Description
	time	DateTime	Datetime object the macro will execute.
	macroName	String	Name of the Macro that will execute.
	scheduleType	String	The Type of Schedule.
	typeName	String	The name of the Type.

API Sample

{"service":"Enterprise","system":"System1","command":"GetCurrentSchedule"}\r\n

Response

{"service":"Enterprise","system":"System1","command":"GetCurrentSchedule","success":"true", "error":"", "data":[{"time":"2015-07-0

3.14 GetDaySchedule

Returns an array of current schedule objects that are to be executed for the rest of the day.

Arguments

	Name	Type	Description
	year	Number	Year of the day schedule.
	month	Number	Month of the day schedule. Month 0 is January.
	day	Number	Day of the schedule. Days start with 1.

Return Schedule object

	Name	Type	Description
	time	DateTime	Datetime object the macro will execute.
	macroName	String	Name of the Macro that will execute.
	scheduleType	String	The Type of Schedule.
	typeName	String	The name of the Type.

API Sample

{"service":"Enterprise","system":"System1","command":"GetDaySchedule","year":2015,"month":0,"day":25}\r\n

Response

```
{"service":"Enterprise","system":"System1","command":"GetCurrentSchedule","success":"true", "error":"",,"year":2015,"month":0,"day
```

Endeavor Service Commands

Required Fields

service	command	workflow

Discovery Service Commands

Required Fields

service	command