

## Configuration API

Solstice Host URL: IPAddress/api/config

The configuration API is focused on setting and reading configuration settings that are available in the Configuration Panel and the Solstice dashboard. These are admin settings that are concerned with customization, security, and network configuration options.

The top level keys are primarily associated with device-specific settings and are not grouped into a sub-hierarchy. For each table, other than the 'Top Level' table that does not require a hierarchical key, the hierarchical key is shown in the first row. This is the key to the set of values that can be set in that table.

### Product/Global Settings

Top Level			
Key	Type	Get/Post	Description
m_displayId	string	Get	This is the unique identifier that Solstice uses to manage a single instance, regardless of how the display is named or its current IP Address
m_serverVersion	string	Get	The current software version running on the Solstice host
m_productName	string	Get	The name of the Solstice software (Solstice).
m_productVariant	string	Get	The generation and type of Pod hardware as a name. For example, 'Gen1' or 'Gen2'
m_productHardwareVersion	int	Get	The Pod hardware generation as a version number (Pod-only). For example, 1 or 2. Software returns 9999.

### Display Communications Settings

m_displayInformation			
Key	Type	Get/Post	Description
m_ipv4	string	Get	The current primary IP Address assigned to the Solstice display/endpoint.
m_displayName	string	Get/Post	The display name used for Solstice discovery. This name is shown on the Solstice splash-screen and appears in the client discovery list for connecting to the Solstice display.
m_hostName	string	Get/Post	The Solstice host device's current hostname.
m_port	int	Get/Post	The base port that Solstice will utilize for TCP/IP communications. Solstice uses three ports defined by the base port value, +1, and +2.

### Global Display Settings

m_generalCuration			
Key	Type	Get/Post	Description
language	string	Get/Post	A code that denotes the current language setting. Valid options are: "en_US" for US English, "ja_JP" for Japanese, and "xx".
showSplashScreen	bool	Get	Show or hide the splash screen background image when the splash-screen is visible.
localConfigEnabled	bool	Get	Enable or disable access to the local Configuration Panel on the Solstice host (via mouse/keyboard). When disabled the onscreen configuration menu is no longer visible to users.

browserConfigEnabled	bool	Get	If this is disabled, the API cannot interact with the host since the device considers the API browser configuration.
autoConnectOnClientLaunch	bool	Get	Enable or disable quick-connect auto launch
hideOnLastClientDisconnect	bool	Get	Windows Only - hide the display software if no connections are active
launchOnClientConnect	bool	Get	Windows Only - bring display software to foreground when a connection is made
launchOnSystemStart	bool	Get	Windows Only - start display software when host machine boots
theme	int	Get	Windows Only - selects between the 6 preset themes. Zero indexed, so the options are 0-5.
advancedRenderingEnabled	bool	Get	Windows Only - enable (1) or disable (0) advanced rendering for better animations at the expense of host processing cycles.
windowMode	int	Get	Windows Only - shows whether Solstice is displayed as window app (0), fixed size (1) , or fullscreen (2)
windowTop	int	Get	Windows Only - if windowMode = 1, this is the top coordinate for the fixed window
windowLeft	int	Get	Windows Only - if windowMode = 1, this is the left coordinate for the fixed window.
windowWidth	int	Get	Windows Only - if windowMode = 1, this is the width in pixels of the fixed window.
windowHeight	int	Get	Windows Only - if windowMode = 1, this is the height in pixels of the fixed window.

## Authentication Modes

m_authenticationCuration			
Key	Type	Get/Post	Description
authenticationMode	int	Get	Pre 3.0 Solstice only - security on host is open (0), screen key (1), password (2), moderated (3), or select at runtime (4)
screenKeyEnabled	bool	Get	Check whether screen is key protected
moderatorApprovalDisabled	bool	Get	Check whether moderator mode is enabled or disallowed
sessionKey	string	Get	The current session key currently displayed on the screen and required to be entered by clients before connecting to the display

## Main Network and Feature Record

m_networkCuration			
Key	Type	Get/Post	Description
connectionShowFlags	Bitwise flags (post as decimal int)	Get/Post	<p>Bitwise flags for showing various connection related information on the Solstice splash-screen.</p> <ul style="list-style-type: none"> <li>Bit 1: Main Screen - Display Name Enabled</li> <li>Bit 2: (Don't Care)</li> <li>Bit 3: Show IP Address on Main Screen</li> <li>Bit 4: Presence Bar - Display Name</li> <li>Bit 5: Presence Bar - IP Address</li> <li>Bit 6: Show Screen Key on Main Screen</li> <li>Bit 7: Presence Bar - Screen Key</li> <li>Bit 8: Show Presence Bar</li> <li>Bit 9: Connect by App Instructions</li> <li>Bit 10: App Instructions - Artwork/Icons</li> <li>Bit 11: Connect by Web Instructions</li> <li>Bit 12: Web Instructions - Artwork/Icons</li> <li>Bit 13: Show SSID Info (when enabled)</li> </ul> <p>Pod only. Windows software returns 32 '1's.</p>
discoveryBroadcastEnabled	bool	Get	Enable or Disable UDP Discovery broadcast. When enabled the Solstice host will broadcast discovery information on local network every 5 seconds allowing clients to discover and connect.
publishToNameServer	bool	Get	Publish discovery information to Solstice Discovery Service so clients can discover the Solstice host without the need for broadcast traffic/discovery.
maximumConnections	int	Get/Post	The current number of maximum allowable simultaneous connections. Cannot be set past maximum allowable based on license for host.
maximumLicensedConnections	int	Get	Number of maximum allowable simultaneous connections based on the installed license.
maximumImageSize	int	Get/Post	Maximum size of an image, in bytes, shared by clients. Clients that share images past the maximum will automatically be resized (to save resources).
maximumPublished	int	Get/Post	Maximum number of posts allowed. Users who post past this limit will be given a message that the system is busy.
maximumAirPlayUsers	int	Get/Post	Maximum number of simultaneous AirPlay users allowed (ie iOS mirroring posts). Cannot be set higher than 4.
sdsHostName	string	Get/Post	Primary hostname or IP Address of Solstice Discovery Service to list discovery information.
sdsHostName2	string	Get/Post	Secondary hostname or IP Address of Solstice Discovery Service to list discovery information.
remoteViewMode	int	Get/Post	Enable or disable Browser Look-In feature. 0=disabled, 1=enabled, 2=allow users to toggle on/off at runtime. Passing a value other than 0,1, or 2 disables look-in.

firewallMode	int	Get/Post	Modifies Dual-Network firewall (Pod only) to enable or disable internet traffic between two network interfaces. 0=Block all traffic, 1=Allow ports 80/443.
postTypeDesktopSupported	bool	Get	Enable or disable support for PC/desktop full screen sharing.
postTypeApplicationWindowSupported	bool	Get	Enable or disable support for application window sharing.
postTypeMediaFilesSupported	bool	Get	Enable or disable support for image and video file sharing.
postTypeAirPlaySupported	bool	Get	Enable or disable support for iOS mirroring.
postTypeAndroidMirroringSupported	bool	Get	Enable or disable support for Android full screen mirroring.
bonjourProxyEnabled	bool	Get	Enable or disable the Bonjour Proxy feature that allows iOS users to discover display to mirror to via the Solstice App instead of the Bonjour protocol.
ethernetEnabled	bool	Get	Enable or disable the Ethernet network adapter (Pod-only).
wifiMode	int	Get	Set the wireless network adaptor mode 0 = Off, 1 = Client Mode/Attach to existing wireless, 2= Wireless Access Point.
bulletinEnabled	bool	Get/Post	Enable or disable bulletin text across top of Solstice-enabled Display
bulletinText	string	Get/Post	Text to be displayed in bulletin
emergencyEnabled	bool	Get/Post	Enable or disable the emergency broadcast
emergencyText	bool	Get/Post	Text of emergency broadcast
wifiConfig (Pod Only)			
ssid	string	Get	SSID of the host wireless network to connect to via wireless client mode.
security	int	Get	Security protocol of the Pod wireless network (Pod-only). 0=open, 1=WEP, 2=WPA, 3=WPA2, 4=EAP
eap	int	Get	EAP method of authentication when in EAP mode (Pod-only). 0=None, 1=PEAP, 2=TLS, 3=TTLS, 4=PWD, 5=SIM, 6=SIM
phase2	int	Get	Phase2 authentication method. 0=None, 1=PAP, 2=MSCHAP, 3=MSCHAPv2, 4=GTC.
password	string	Get	Password used to authenticate to host network. Get returns "(*)"
dhcp	bool	Get	Enable or disable DHCP protocol on wireless interface.
staticIP	string	Get	Static IP address to assign to device on wireless interface.
gateway	string	Get	Wireless interface gateway.
prefixlength	int	Get	Prefix setting for wireless interface.
dns1	string	Get	First DNS for wireless interface.
dns2	string	Get	Second DNS for wireless interface.
apConfig (Pod Only)			
SSID	string	Get	SSID for standalone wireless access point .
SecurityMode	int	Get	Security protocol for wireless interface when in WAP mode (Pod-only). 0=open, 3=WPA2.
PSK	string	Get	Password to use for authenticating users connecting to wireless access point.

ethernet (Pod Only)			
dhcp	bool	Get	Enable or disable DHCP for the Ethernet network interface.
staticIP	string	Get	Static IP to assign the device's Ethernet network interface (Pod-only).
gateway	string	Get	Gateway IP Address for the Ethernet network interface (Pod-only).
prefixLength	int	Get	Prefix length value (netmask, Pod-only).
dns1	string	Get	First DNS Server IP Address (Pod-only).
dns2	string	Get	Second DNS Server IP Address (Pod-only).
httpProxyServerSettings			
enabled	bool	Get	Enable or disable use of an HTTP Proxy.
ip	string	Get	IP Address of HTTP proxy server.
port	int	Get	Communications port of HTTP proxy server.
username	string	Get	Username to be used when authenticating to the HTTP proxy server.
password	string	Get	Password to be used when authenticating to the HTTP proxy server.
httpsProxyServerSettings			
enabled	bool	Get	Enable or disable use of an HTTPS Proxy.
ip	string	Get	IP Address of HTTPS proxy server.
port	int	Get	Communications port of HTTPS proxy server.
username	string	Get	Username to be used when authenticating to the HTTPS proxy server.
password	string	Get	Password to be used when authenticating to the HTTPS proxy server.

*m\_networkCuration* also has a nested group key 'm\_rssFeedList' that can GET or POST an array of messages to be displayed in the RSS feed across the top of a Solstice-enabled display. It may include custom messages or standard RSS urls. For example:

```

"m_rssFeedList": [
  {
    "enabled": true,
    "name": "Custom Message",
    "length": 0,
    "uri": "This is a test123"
  },
  {
    "enabled": true,
    "name": "solstice wireless display",
    "length": 3,
    "uri": "https://www.mersive.com/go.xml"
  }
]

```

## Licensing

m_licenseCuration			
Key	Type	Get/Post	Description
licenseStatus	int	Get	0=No license; 1=Error reading license; 2=License OK; 3=License Expired
trustFlags	int	Get	7=fully trusted; <7 and the license isn't trusted and must be repaired

fulfillmentType	string	Get	"PUBLISHER ACTIVATION" or "TRIAL"
enabled	bool	Get	Tells whether the license on the machine is enabled (1) or disabled (0)
fulfillmentId	string	Get	A unique numerical ID used to distinguish between different machines
entitlementId	string	Get	activation code used to activate the license on this machine
productId	string	Get	"Solstice"
suitId	string	Get	Should be blank. Internal use.
expirationDate	string	Get	"permanent" or the date the license will expire
featureLine	string	Get	The license string returned from the license server
numDaysToExpiration	int	Get	999999999 if the license is permanent, otherwise the number of days until it expires
maxUsers	string	Get	max number of users allowed by license. eg. "Unlimited", "4"
licensing_maxPosts	int	Get	maximum number of posts allowed by the license type.
licensing_maxPostsIsConfigurable	bool	Get	Is the user allowed to change the value of maxPosts?
licensing_atMaxPostsReplace	bool	Get	When the max post count is reached, should the next post replace (1) or not display (0)?
licensing_maxUsers	int	Get	maximum users allowed (0=Unlimited)
licensing_maxUsersIsConfigurable	bool	Get	Is the user allowed to change the value of maxUsers?
licensing_remoteViewEnabled	bool	Get	Can remote view be enabled?
licensing_remoteViewsConfigurable	bool	Get	Is remote view able to be configured?
licensing_runtimeAccessControls	bool	Get	Can users can select the runtime access (moderated, screen key, etc.)?

## Passwords

m_userGroupCuration			
Key	Type	Get/Post	Description
adminPassword	string	Post	Administrative password for host. Note – Get on this value will always return "unknown".
passwordValidationEnabled	bool	Get	Enable/Disable validation of admin password using the following rules: <ul style="list-style-type: none"> <li>Minimum of 8 characters.</li> <li>At least one uppercase and one lowercase character.</li> <li>At least one number or special character.</li> </ul>

## System Settings Record

m_systemCuration (Pod Only)			
Key	Type	Get/Post	Description
autoDateTime	bool	Get	Enable or disable the use of an NTP time server. If disabled, date and time is set manually.
ntpServer	string	Get/Post	Non-default NTP time server IP Address. If left blank, a default internet time server will be used when autoDateTime is true.
dateTime	int	Get/Post	Date and time value, represented as a 64-bit integer in milliseconds since January 1, 1970, 00:00:00 GMT.
timeZone	string	Get/Post	Time zone code represented as a string from the set of available time zones.

timeZones	String array	Get	Array of available time zone strings. See Appendix A.
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## Splashscreen Commands

The background image shows on a Solstice-enabled display when no content is shared. The 'classic' splash screen has a single, static image, while the 'modern' splash screen can have up to 6 custom images in the carousel.

### Changing the Classic Splash Screen Image:

POST your desired file (key is "file") to `IPAddress/api/config/splashbackground` as type `formData`. In Postman or a similar tool, you can do this by entering the URL, selecting 'POST', entering 'file' as the key, and changing the value type from 'text' to 'file'. This will allow you to upload a file from your computer and post it to the Solstice host.

Reset the background to the default image by changing the value type back to 'text' and entering 'reset default' as the value. POST to the URL to see the change on your Solstice host.

### Changing the Modern Splash Screen Image(s):

There are 6 slots for custom images in the modern splash screen carousel, numbered 0-5. To upload a new image or reset a specific image to the carousel, use the same command as the classic splash screen appended with '/n' where n is the number of the image to be changed.

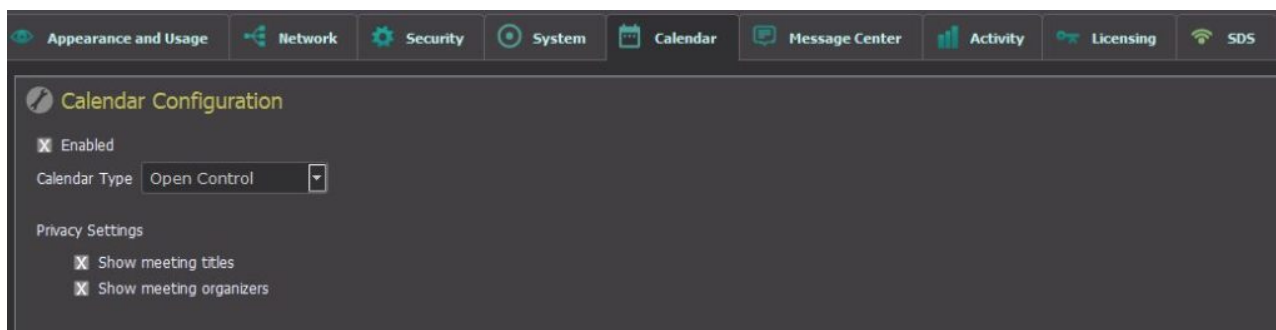
For example, to upload a new image to the 4<sup>th</sup> place in the carousel, you would POST your image file to `IPAddress/api/config/splashbackground/3`.

Note that you cannot remove images from the carousel via the API – that can only be done using the dashboard. If you are only using the first 3 spots then POST 'reset default' to `IPAddress/api/config/splashbackground/4`, the 5<sup>th</sup> location in the carousel will be populated with the default image and added to your carousel.

## Calendar API

**Solstice Host URLs:** `IPAddress/api/calendar/set` and `IPAddress/api/calendar/clear`

The calendar API allows an admin to send scheduling information to a Solstice host in a fully customizable way, without tying the host to a specific calendar via an Exchange server. To communicate with a host via the API, the calendar must be enabled and the calendar type set to 'Open Control'.



There are two URLs that affect host endpoints:

`IPAddress/api/calendar/clear` requires no data. Hitting this URL clears all calendar data.

`IPAddress/api/calendar/set` lets you POST JSON data about upcoming meetings. Each POST will override any existing calendar data, so the POST should be an array of all meeting/availability information that should show on the display.

## Calendar Commands

calendarItems			
Key	Type	Get/Post	Description
id	string	Post	Unique meeting ID. Used internally only, does not show up on display.
startTime	long int	Post	Meeting start time in Unix epoch seconds.
endTime	long int	Post	Meeting end time in Unix epoch seconds.
title	string	Post	Title of meeting that will show up on the display if meeting names are enabled in the Dashboard.
organizer	string	Post	Name of meeting organizer that will show up on the display if enabled in the Dashboard.

Example POST data:

```
{
  "calendarItems": [
    {
      "id": string-with-unique-id-for-meeting,
      "startTime": long-integer-with-meeting-start-time-in-Unix-epoch-seconds,
      "endTime": long-integer-with-meeting-end-time-in-Unix-epoch-seconds,
      "title": string-with-meeting-title
      "organizer": string-with-meeting-organizer-name
    },
    {
      ... another meeting ...
    },
    {
      ... other meetings ...
    }
  ]
}
```

## Version and Update Control API

Solstice Host URLs:

- **IPAddress/api/version/currentversion** // returns JSON containing the field 'currentVersion' as a string.
- **IPAddress/api/version/updateavailable** // returns JSON containing the bool field 'isUpdateAvailable'. If this value is true, the string field 'updateAvailableTo' will be returned as well.
- **IPAddress/api/version/update** // updates Pod to version returned as 'updateAvailableTo' value.



# Stats API

Solstice Host URL: `IPAddress/api/stats`

The stats API reports statistics about the current status of the Solstice host. These stats are instantaneous and can provide third-party developers with a snapshot of activity.

## Global Stats Record

Top Level			
Key	Type	Get/Post	Description
m_displayId	string	Get	This is the unique identifier that Solstice uses to manage a single instance, regardless of how the display is named or its current IP address
m_serverVersion	string	Get	The current software version running on the Solstice host.
m_displayInformation			
m_displayName	string	Get	The name of the display, shown on welcome screen and used for discovery.
m_productName	string	Get	The name of the Solstice software (Solstice).
m_productVariant	string	Get	The generation and type of Pod hardware as a name (Pod-only). For example, 'Gen1' or 'Pod Gen2'.
m_productHardwareVersion	int	Get	The Pod hardware generation as a version number (Pod-only). For example, 1 or 2. Software returns 9999.
m_statistics			
m_currentPostCount	int	Get	Total number of posts currently shared to the display.
m_currentBandwidth	int	Get	Total network bandwidth being used in bytes. 1Mb is 125,000 bytes.
m_connectedUsers	int	Get	Number of currently connected users.
m_timeSinceLastConnectionInitialize	int	Get	Time since the device last has a session initiated. Returns in milliseconds.
m_currentLiveSourceCount	int	Get	Number of current live sources such as USB camera.

# Command API

**Solstice Host URL:** IPAddress/api/control

The Command API addresses runtime control of a Solstice host from a third-party application. Commands are executed by issuing a GET to the URL that corresponds to the command to be executed. The Command API does not make use of the JSON key/value records as the other APIs do.

Security is enforced by requiring password authentication when an administrator password has been set. If an incorrect or no password is appended to the GET when one is needed, the command will be ignored.

The URLs for each of the commands and their effects are listed below:

Command URL List	
URL	Impact
/api/control/clear	Clears the display of all posts.
/api/control/boot	Boots all connected users and deletes all posts on the display. Returns display to splash-screen.
/api/control/reboot	Reboots host as soon as command is sent.
/api/control/resetkey	Replace the current screen key with a new random screen key for connection authentication.

# SDS API

**SDS Server URL:** IPAddress/api/discover

The SDS API reports statistics about the current status of the Solstice Discovery Service directory. These stats are instantaneous and can provide third-party developers with a snapshot of all hosts managed by this SDS server. Note that the target IP address must be the computer with SDS installed, not a Pod or Windows Host. While SDS may be installed on the same machine as a Windows Host, the API should not be used to call the server while the Solstice Software is active. In the Solstice Dashboard, this is the IP address shown in the SDS tab:



Hitting a target URL of a Solstice host returns a single dictionary of key:value pairs pertaining to that one host. [sds]/api/discovery returns an array of dictionaries, where each dictionary contains the same keys but different values, depending on the values associated with the host in question. For example, sending a 'GET' to an SDS server with two associated hosts returns something similar to this:

```

1 {
2   "displays": [
3     {
4       "name": "Pikes Peak PC",
5       "id": "6cebfe86-3998-11e7-ab88-e09467b10fb1",
6       "ipv4": "192.168.3.31",
7       "port": 53100,
8       "user_count": 0,
9       "locked": false,
10      "airplay_enabled": false,
11      "session_capable": false,
12      "in_session": false,
13      "tags": []
14    },
15    {
16      "name": "Solstice Demo 01",
17      "id": "b242b840-4824-49d7-b5da-adb3a434a846",
18      "ipv4": "192.168.3.31",
19      "port": 53400,
20      "user_count": 0,
21      "locked": false,
22      "airplay_enabled": false,
23      "session_capable": false,
24      "in_session": false,
25      "tags": []
26    }
27  ]
28 }

```

## SDS Commands

display			
Key	Type	Get/Post	Description
name	string	Get	Assigned name of the Solstice host.
id	string	Get	This is the unique identifier that Solstice uses to manage a single instance, regardless of how the display is named or its current IP address.
ipv4	string	Get	IP address of Solstice host.
port	int	Get	Base port for host. The base port is always used along with the next two sequential ports.
user_count	int	Get	Number of users currently connected to the host.
locked	bool	Get	Checks if the display is locked
airplay_enabled	bool	Get	Checks if AirPlay mirroring is enabled for the display.
session_capable	bool	Get	Checks if the display is capable of starting a session. Would return 'false' if the host is a Windows PC that does not have the Solstice Software actively running.
in_session	bool	Get	Checks if host is involved in an active session, defined by one or more connections.
tags	array	Get	<p>(Only shows if display has assigned tags). Returns array of dictionaries including the assigned tags' tag names ("tag_name":string) and color ("tag_color_index":int). There are four colors of tag:</p> <ul style="list-style-type: none"> <li>• 0 = blue</li> <li>• 1 = orange</li> <li>• 2 = green</li> <li>• 3 = pink</li> </ul>

session_name	string	Get	Only shows if in_session=true. Returns nothing unless a session name has been assigned, such as for a Multi-Room meeting.
synced_display_ids	array	Get	Only shows if in_session=true. Returns nothing unless multiple displays are synced to the session, and then returns array of display IDs.