

eSpark powered by **Jamf Pro**

Integrated Product Setup Guide for Jamf Pro 10 and Newer



Table Of Contents

[Jamf Pro Configuration for eSpark on iPad](#)

[Device Setup](#)

[Supervision](#)

[iOS version](#)

[System Configuration](#)

[Provide your externally facing JSS URL:](#)

[Create a JSS smart or static mobile device group for your eSpark iPads](#)

[Create a new JSS User for eSpark with limited API credentials:](#)

[Create a separate VPP account for eSpark \(optional\)](#)

[Configure the eSpark App](#)

[Review the eSpark Network Requirements documentation](#)

[Overview of Responsibilities](#)



Jamf Pro Configuration for eSpark on iPad

This guide outlines the details and steps necessary to configure your JSS for an eSpark implementation. Students can begin using eSpark on iPads managed by the JSS without your IT department ever needing to touch a single device. Our MDM integrations are seamless to setup and operate behind the scenes via RESTful API calls — allowing your district to leverage the robust feature set of the Jamf Pro while also delivering automated, differentiated content to your students.

Device Setup

1. Supervision

All eSpark devices must be supervised to allow for silent app installs. We strongly recommend and prefer that you enroll your eSpark devices in Apple’s Device Enrollment Program (DEP). DEP automatically supervises enrolled devices upon activation and users cannot manually delete a DEP management profile from a device. **Devices ineligible for DEP enrollment must be supervised by Apple Configurator or Apple Configurator 2.** For more information about how to enroll devices in the JSS, please reference your Jamf Pro User Guide or contact Jamf support.

2. iOS version

All eSpark devices must be running **iOS 9.3.5 or newer** to enable device-based app assignment. eSpark is also compatible with all versions of iOS 10 and 11.

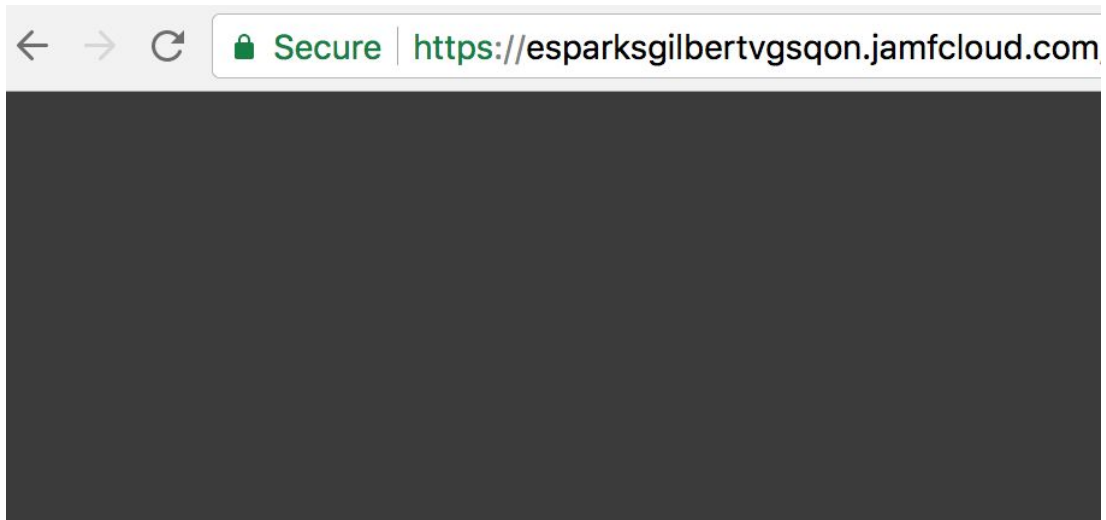
JSS System Configuration

Minimum Requirements	
JSS Version	10 or newer
iOS Version	9.3.5 or newer
Apple IDs	Not required
JSS Users	Not required
JSS Sites	Permissible use of Sites: <ol style="list-style-type: none">1. If the VPP sToken used for eSpark is assigned to a Site, all devices used for eSpark must also be assigned to that same Site (e.g. VPP = Oak Site ; eSpark devices = Oak Site)

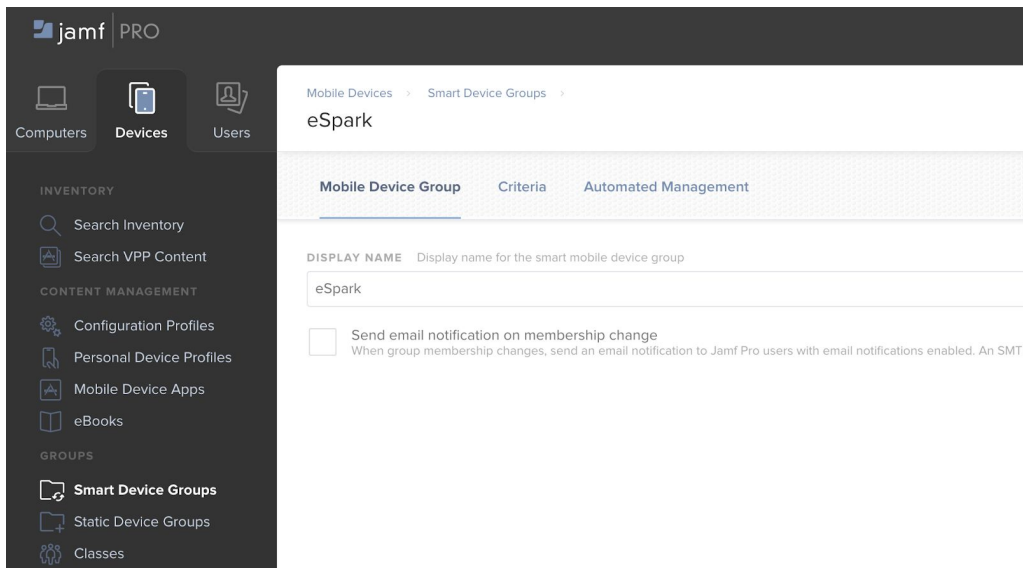


	<p>2. If your eSpark devices are spread across multiple Sites, the VPP account used for eSpark <u>cannot</u> be assigned to a Site (e.g. VPP = None/no Site ; eSpark devices = Oak Site, Elm Site, Maple Site, etc.)</p> <p>Impermissible use of Sites:</p> <p>1. The VPP account used for eSpark <u>cannot</u> be assigned to a Site different than the eSpark devices (e.g. VPP = Oak Site ; eSpark devices = Elm Site)</p>
Update Device Inventory frequency	At least once per day.
Proxy Server Profile	If students will be using eSpark at home or off school premises, their iPads must be able to communicate with the JSS server at all times and from any location. Significant lapses in communication between the device and the JSS server can lead to a buildup of pending commands that can place a heavy load on the server once devices check-in to the JSS again.
JSS server requirements	<p>Compatible with on-premise and SaaS hosted environments. Device server must be externally facing to allow for RESTful API calls. Consult with Jamf support on proper server configuration and specifications for this integration. Server should be able to consistently handle 20-50 API calls per minute.</p> <p>Tomcat RAM recommendations:</p> <ul style="list-style-type: none"> ● <u><500 devices:</u> 4-8GB of dedicated RAM ● <u>500-1000 devices:</u> 8-12GB of dedicated RAM ● <u>>1000 devices:</u> Consult with Jamf support on requirements. It may be necessary to configure a dedicated JSS server clustered with your primary JSS behind a load balancer.

1. Provide your externally facing JSS URL:



2. Create a JSS smart or static mobile device group for your eSpark iPads



Note: Smart or static user groups are not compatible with this integration. You must create a mobile device group.



3. Create a new JSS User for eSpark with limited API access:

Please create a JSS account for eSpark. **System Settings>JSS User Accounts and Groups** We recommend creating an account with the username 'eSpark'. The school may define the password and provide the credentials to a member of the eSpark team.

User type: Standard User

Privilege Set: Custom

Access Status: Enabled

Jamf Pro Server Objects (only applicable permissions listed)

	Create	Read	Update	Delete
Jamf Pro User Accounts & Groups		X		
Advanced Mobile Device Search	X	X	X	
Configurations		X		
Mobile Device Apps	X	X	X	X
Mobile Device Extension Attributes		X		
Mobile Devices		X	X	
Sites		X		
Smart Mobile Device Groups	X	X	X	
Static Mobile Device Groups	X	X	X	
VPP Accounts	X	X	X	
VPP Assignments	X	X	X	
VPP Invitations	X	X	X	

Jamf Pro Server Settings: None

Jamf Pro Server Actions: View Event Logs, Send Blank Pushes to Mobile Devices, and Send Inventory Requests to Mobile Devices



4. Provide VPP account credentials to eSpark

An Apple Volume Purchase Program (VPP) account is required to purchase iOS apps used for eSpark. You can either use an existing district VPP account or create a new VPP account just for eSpark. Whether you use an existing account or create a new one, you must share the login credentials with eSpark so we can facilitate the purchase of apps. You will always retain full ownership over this VPP account and its content.

Note: we register all eSpark apps in the JSS using the following naming convention: “*App Name - eSpark*”. If you utilize sites in your JSS architecture, the naming convention differs slightly: “*App Name - eSpark - Site*”

This ensures we don’t modify the scope of existing apps in your JSS App Catalog. For example, let’s say that you already have a copy of the Doceri app in your App Catalog. Rather than edit the scope/details of your copy of Doceri, we will create a duplicate copy named “Doceri - eSpark”. Using this method, we can still leverage available copies of the Doceri app that you may have already purchased on your VPP sToken (so we don’t double purchase paid app licenses) while also retaining important app details (e.g. installation method, scoped users/devices) that you have configured on your copy of the app. This keeps our app catalog visibly and functionally separate from your own.



5. Configure the eSpark App¹

General tab:

- Distribution Method: 'Install Automatically/Prompt Users to Install'
- Automatically Update App: On
- Make app managed when possible
 - Make app managed if currently installed as unmanaged
 - Remove app when MDM profile is removed

¹ To configure the eSpark app, please ensure there is at least 1 copy of the app purchased within the eSpark specific VPP account



Mobile Devices > Mobile Device Apps >

eSpark

General Scope VPP App Configuration

DISPLAY NAME Display name for the app

eSpark

Enabled

SITE Site to add the app to

None

CATEGORY Category to add the app to

None

VERSION Version of the app

1.8.2

BUNDLE IDENTIFIER Bundle identifier for the app

com.esparklearning.espark

Free
App is free

DISTRIBUTION METHOD Method to use for distributing the app

Install Automatically/Prompt Users to Install

Display app in Self Service after it is installed

Require tethered network connection for app installation (iOS 10.3 or later)
Require the device to have a tethered network connection to download the app

Automatically update app
Automatically update app description, icon, and version in Jamf Pro and on mobile devices

ITUNES COUNTRY OR REGION Country or region to use when syncing app with iTunes

United States

ITUNES SYNC TIME

Time to sync with iTunes each day to automatically update app description, icon, and version in Jamf Pro and on mobile devices

12 : 00 a.m.

Make app managed when possible
Make the app managed when managed app requirements are met

Make app managed if currently installed as unmanaged
Manage the app if it is currently installed as an unmanaged app (the user is prompted to allow management on unsupervised devices)

Remove app when MDM profile is removed

Prevent backup of app data



Scope tab:

Assign to the eSpark mobile device group

eSpark

General **Scope** VPP App Configuration

Targets	Limitations	Exclusions
TARGET MOBILE DEVICES Mobile devices to distribute the app to. Does not apply to personally owned devices Specific Mobile Devices	TARGET USERS Users to distribute the app to Specific Users	

TARGET	TYPE
eSpark Devices	Smart Mobile Device Group

VPP tab:

- Assign VPP Content
- VPP Account: eSpark VPP

eSpark

General Scope **VPP** App Configuration

Device Assignments	VPP Codes
VPP CONTENT <input checked="" type="checkbox"/> Assign VPP Content Assign VPP content to mobile devices with iOS 9 or later VPP ACCOUNT VPP account to use to assign content jamf-espark-demo1@esparklearning.com	
TOTAL CONTENT 49	IN USE 0

App Configuration tab:

The eSpark app requires a one time custom value in the App Configuration. Click on **Mobile Devices>Apps>eSpark >App Configuration**

Click in the empty box and paste the following payload:

<dict>



```
<key>UDID</key>
<string>$UDID</string>
<key>WiFiMac</key>
<string>$MACADDRESS</string>
<key>SerialNumber</key>
<string>$SERIALNUMBER</string>
</dict>
```

Click **Save**

6. Review the eSpark Network Requirements documentation

<http://esparklearning.freshdesk.com/solution/articles/1000030610-hosts-ports-used-by-espark>

Overview of Responsibilities

eSpark Learning will:

- Ensure client JSS server is associated with the eSpark server
- Provide the client with documentation outlining network requirements for the eSpark program
- Configure throttling limits to minimize API calls/load on client JSS server (if necessary)
- Proactively notify Jamf and client of any known eSpark related bugs impacting the integration

Client will:

- Upgrade their JSS to version 10 or newer
- Upgrade all eSpark iPads to iOS 9.3.5 or newer
- Enroll in Apple's Deployment Programs (DEP, VPP)
- Supervise all eSpark iPads either by Apple's Device Enrollment Program (DEP), Apple Configurator or Apple Configurator 2 (supervision is required for silent app installations)
- Create a new VPP account used only for the eSpark integration
- Ensure iPads can communicate with their JSS server when they are off school premises (e.g. at home)
- Enroll iPads in the JSS
- Troubleshoot network errors affecting iPad connectivity and/or external communication with the JSS server
- Ensure eSpark iPads always have at least 1GB of free space
- Ensure eSpark iPads maintain at least 10% battery life
- Ensure implementation of Sites with eSpark devices meets one of two required scenarios mentioned on p.3-4 above



eSpark Learning and its representatives are not responsible for:

- Training clients on how to use the JSS console
- Managing the JSS console for clients
- Advising clients on JSS features and functionality
- Troubleshooting client's network or assessing infrastructure health
- iPad purchasing, configuration, distribution, maintenance, or troubleshooting