



PAXSTORE TRIPLE SIGNING QRG

02-10-2021

V1.5

Preface

Copyright © 2020 PAX Technology, Inc. All rights reserved.

The Programs (which include both the software and documentation) contain proprietary information; they are provided under a license agreement containing restrictions on use and disclosure and are also protected by copyright, patent, and other intellectual and industrial property laws. Reverse engineering, disassembly, or decompile of the Programs, except to the extent required to obtain interoperability with other independently created software or as specified by law, is prohibited.

This document is provided for informational purposes only. All features and specifications are subject to change without notice. If there are any problems in the documentation, please report them to Pax in writing. This document is not warranted to be error-free. Except as may be expressly permitted in the license agreement for these Programs, no part of these Programs may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose.

Security Notice: No part of this publication may be copied, distributed, stored in a retrieval system, translated into any human or computer language, transmitted, in any form or by any means, without the prior written consent of PAX Technology, Inc.

PAX is a registered trademark of PAX Technology Limited in China and/or other countries. All other trademarks or brand names are the properties of their respective holders.

TECHNICAL SUPPORT

If there is a problem while installing, registering or operating this product, please make sure to review the documentation. If unable to resolve the issue, please contact PAX.

PAX support operates 24 hours a day, 7 days a week. The level of access to this Service is by the support plan arrangements made between PAX and the Organization. Please consult this support plan for further information about entitlements, including the hours when telephone support is available.

TECHNICAL SUPPORT CONTACT INFORMATION

Phone: (877) 859-0099

Email: support@pax.us

URL: www.pax.us

Revision History

Date	Version	Description
07-22-2020	1.0	Initial release
7-24-2020	1.1	Document formating, grammar, spelling changes
10-27-2020	1.2	Added - CA certificate information
11-03-2020	1.3	Added - How to disable Triple Signing section
11-05-2020	1.4	Added - Developer Assignment section
02-10-2021	1.5	Added - When the reseller certificate is set to yes it has been verified with supporting image. Added - Terminal Detail section reseller certificate image.

Table of Contents

Introduction	1
Benefits of Triple Signing	1
Enabling Triple Signing	1
How to Enable Triple Signing at the Reseller Level	2
Verified Reseller Certificate	3
How to Disable Triple Signing at the Reseller Level	3
Triple Signing CA Certificates Storage	3
Minimum OS Versions	5
Developer Assignment.....	5
PAXSTORE Customer Support	6

1. Introduction

The PAXSTORE security feature called Triple Signing consists of three levels of signing an application that are currently supported only on PaxBiz (Android-based) terminals.

- In the 1st level, PAX signs the application so that it will run on PAX terminals.
- In the 2nd level, the developer can sign the application as part of the Android development solution.
- The optional 3rd level is for PAX Marketplace owners, Resellers, and Pax partners to enable.

Once Triple Signing is enabled and installed onto the terminal, it is locked to that Marketplace.

1.1 Benefits of Triple Signing

- Triple Signing locks the terminal to a Marketplace (so the terminal cannot freely move from Marketplace to Marketplace) and prevents offline loading of an APK.
- A Factory Reset will not clear the Reseller signature.
- The terminal owner can still freely move the terminal from one Reseller to another regardless if the new Reseller has Triple Signing enabled or disabled. Everything is transparent to the user.
- The PAXSTORE client is smart and can identify if the terminal's operating system is Triple Signing capable and it automatically takes care of the APK installation security methods.
- Triple Signing has no impact on debug terminals.

1.2 Enabling Triple Signing

The optional Triple Signing feature can be enabled for the Marketplace owner. The Marketplace owner can contact paxstore.support@pax.us to request this feature.

Once enabled, the Marketplace owner has two options for the Resellers:

- Give Resellers the ability to enable or disable this feature.
- Resellers are always enabled.

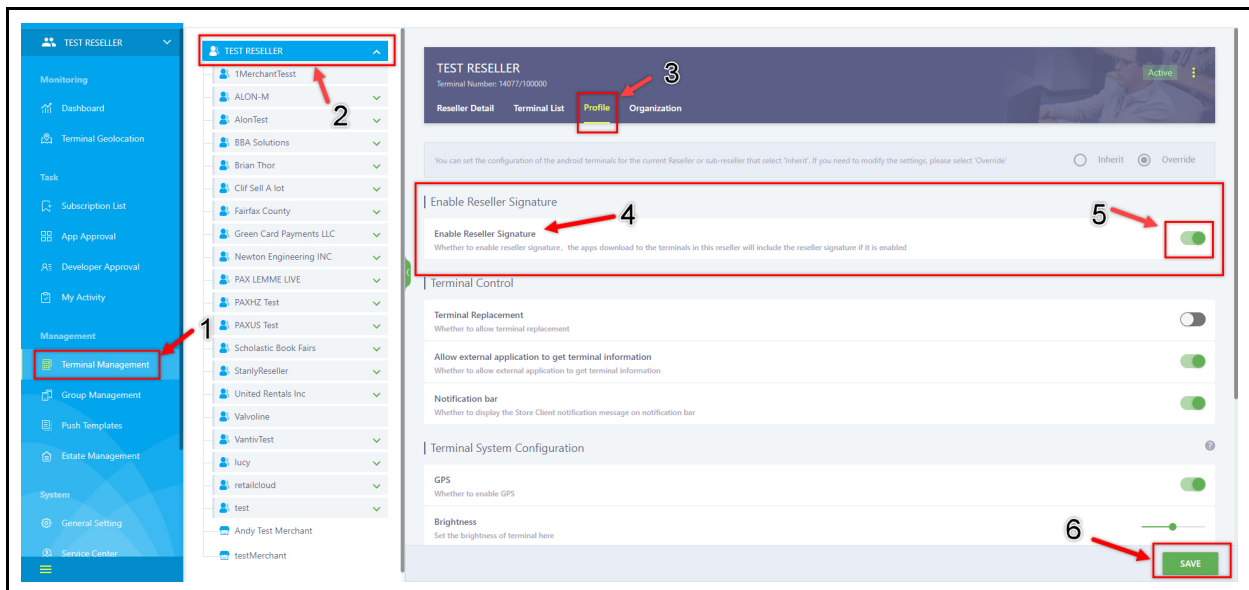
When the Triple Signing option is enabled, the next time the Reseller's Android terminal signs into PAXSTORE, the terminal will be checked for the 3rd signature. If the terminal does not have the 3rd signature, PAXSTORE will sign it.

1.3 How to Enable Triple Signing at the Reseller Level

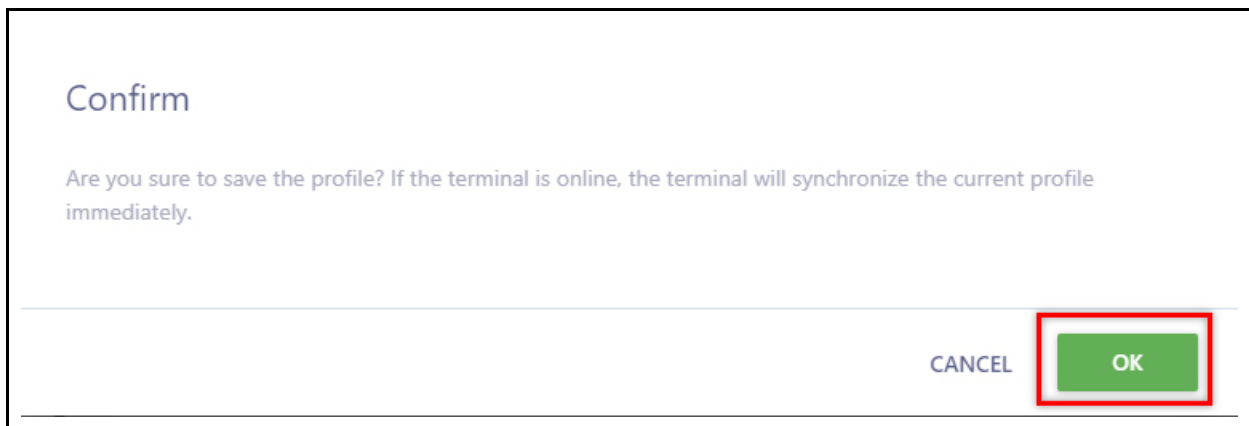
There is an option at the Reseller or Sub-Reseller level to allow the feature to enable or disable Triple Signing. This section covers the steps to enable this option.

Select the following:

1. [Terminal Management]
2. [Reseller Name]
3. [Profile]
4. Locate Reseller Signature Option
5. [Enable Reseller Signature Option]
6. [SAVE]

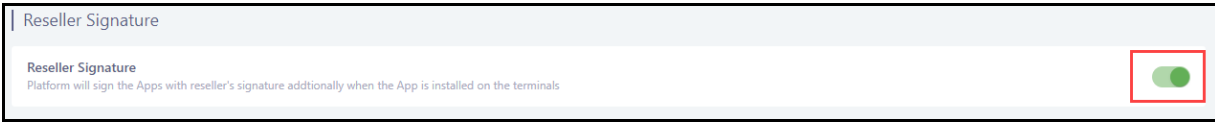


A pop up window will display after selecting **SAVE**. If prompted, enter the password and then select **[OK]**.

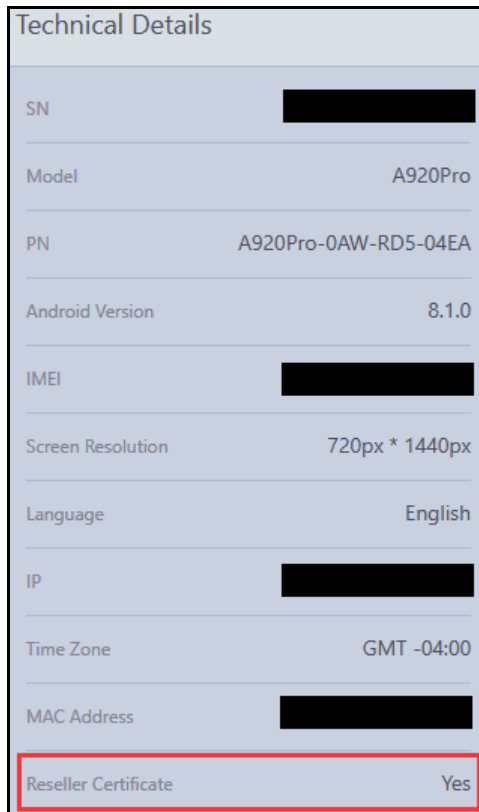


1.4 Verified Reseller Certificate

When the reseller certificate is set to yes, it has been verified.



The reseller certificate status as “Yes” can be viewed in the Terminal Management > Terminal Detail section.

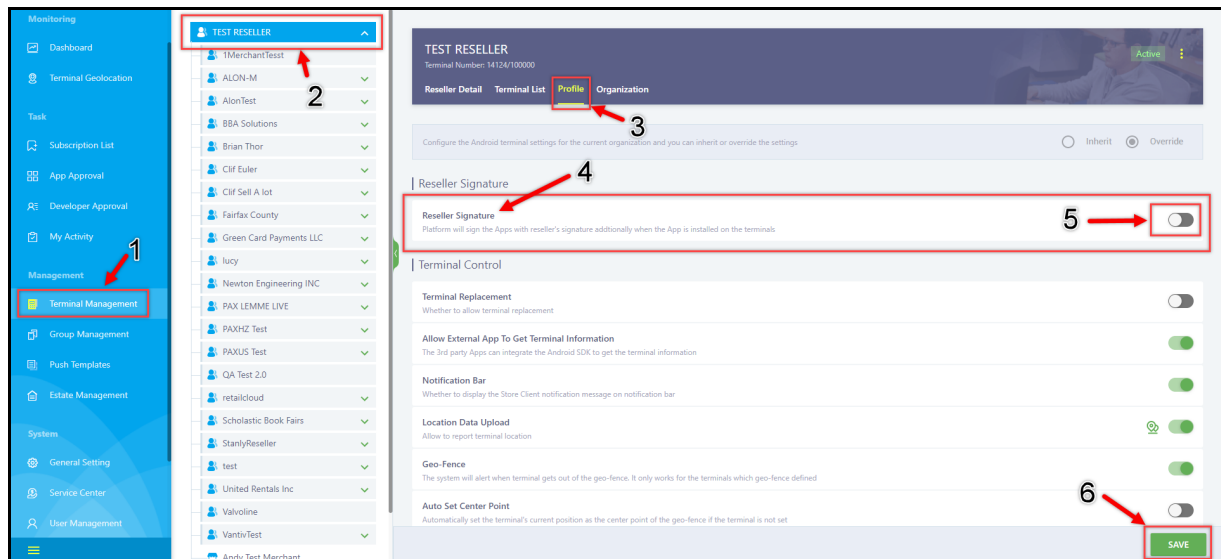


1.5 How to Disable Triple Signing at the Reseller Level

There is an option at the Reseller or Sub-Reseller level to allow the feature to enable or disable Triple Signing. This section covers the steps to disable this option.

Select the following:

1. [Terminal Management]
2. [Reseller Name]
3. [Profile]
4. Locate Reseller Signature Option
5. [Disable Reseller Signature Option]
6. [SAVE]



1.6 Triple Signing CA Certificates Storage

The Triple Signing Keys (CA Certificates) are stored in the Secure Element hardware platform in the terminal.

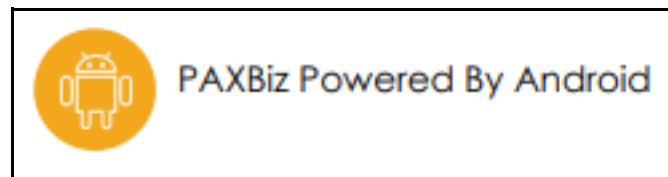
According to Global Platform®:

A SE is a tamper-resistant platform (typically a one chip secure micro controller) capable of securely hosting applications and their confidential and cryptographic data (for example cryptographic keys) in accordance with the rules and security requirements set by well-identified trusted authorities.

1.7 Minimum OS Versions

There is a minimum version of the PAX Android-based operating system (PaxBiz) that is compatible with the Triple Signing feature. Below is a table that includes these versions for reference.

Terminal Model	PaxBiz Operating System Version
A60	A60_PayDroid_6.0_Leo_V07.1.01_20181015.paydroid
A80	PX7A_A80_PayDroid_6.0.1_Taurus_V05.1.05_20180830
A910	A910_PayDroid_6.0_Leo_V07.1.00_20181211.paydroid
A920	A920_PayDroid_5.1.1_Aquarius_V02.3.18_20181218.paydroid
A930	A930_PayDroid_7.1.1_Virgo_V04.3.00_20181108.paydroid
E500	E500_PayDroid_6.0.1_Taurus_V05.1.10_20190114.paydroid
E600	E600_PayDroid_7.1.1_Virgo_V04.1.04_20190111.paydroid
E800	E800_PayDroid_6.0.1_Gemini_V06.1.03_20181226.paydroid



1.8 Developer Assignment

The Developer is assigned to Triple Signing.

PAXSTORE Customer Support

For questions or help with the PAXSTORE please contact your service provider or PAXSTORE customer support.

9am - 1am EDT Monday - Friday

9am - 5pm EDT Saturday

Hours Subject to Change

Contact Information

support@pax.us

(877) 859-0099

www.pax.us

PAX Technology Inc.
8880 Freedom Crossing Trail
Building 400
3rd Floor, Suite 300
Jacksonville, FL 32256

This document is provided for informational purposes only. All features and specifications are subject to change without notice. The PAX name and PAX logo are registered trademarks of PAX Corporation and/or its affiliates. Other names may be trademarks of their respective owners. Copyright 2020, PAX Technology Limited, All rights reserved.

****PAX Technology, Inc. is not responsible for the content, quality, accuracy or completeness of any information or materials contained in on these pages. PAX Technology, Inc. does not endorse any content, viewpoints, products, or services contained on these pages and shall not be held liable for any losses caused by reliance on the accuracy, reliability or timeliness of such information. Any person or entity that relies on any information obtained from these pages does so at his/her own risk.***