Server Management Tools
Title Small Storage Service User's Guide

Table of Contents

1 About This Document

This document explains the title small storage service (TSSS) provided by PlayStation™Network.

An overview of the title small storage service is given first, followed by instructions on how to use the TSSS tool for obtaining the key, which is required for uploading a file onto the TSS server, and for setting the access privilege of accesses to the development environment. Finally, the procedure for uploading a file is explained. For information on the downloading of files by the application, refer to the documents for each platform.

> **Note**
> PlayStation™Network is a common network platform used by PlayStation®4, PlayStation®3, PlayStation®Vita and PSP™ (PlayStation®Portable). This document is made available to all PlayStation®4/PlayStation®3/PlayStation®Vita/PSP™ licensees; there is no distinction made among PlayStation®4, PlayStation®3, PlayStation®Vita and PSP™ unless necessary.

Reference Materials

Refer to the following document for the portal site for accessing the TSSS tool and other Server Management Tools (SMT).

- Server Management Tools Portal User's Guide

Refer to the following documents for using the title small storage service.

- PlayStation®4: NpTss Library Overview, NpTss Library Reference
- PlayStation®3: NP Title Small Storage Overview, NP Title Small Storage Reference
- PlayStation®Vita: NP TSS Library Overview, NP TSS Library Reference
- PSP™: NP Lookup Overview, NP Lookup Reference

2 Overview of the Title Small Storage Service

The title small storage service is an online storage service provided by PlayStation™Network. It is a service for distributing small-scale modification data after the release of an application. This data could be a notification to users, parameters to change the game balance, or data for an in-game event to be held at a certain timing. With each NP Communication ID for PlayStation®4/PlayStation®3/PlayStation®Vita, it is possible to place and distribute a single file (TSS file) up to 64 KiB and 15 files up to 4 MiB on a server. With each NP Communication ID for PSP™, it is possible to place and distribute a single file (TSS file) up to 64 KiB on a server.

Note
The patch system can be used to modify an application after its release or to distribute large data files. For details regarding the patch system, refer to the "Patch and Remaster Overview" document of the SDK for PlayStation®4, and the "Patch Overview" of the SDK for PlayStation®3/PlayStation®Vita/PSP™.

A TSS file is uploaded onto the TSSS upload server using SSH (Secure Shell)/SCP (Secure Copy Protocol). Use the TSSS tool to make settings, for example, for the key required upon authenticating the file upload.

The uploaded TSS file will automatically be deployed to the TSS server accessed by the client.

A client can obtain contents of a TSS file using an API for a client library. Settings can also be made to the TSS server for development using the TSSS tool, for example, to restrict accesses to those by certain IP addresses only.

**Figure 1 Workings of the Title Small Storage Service**
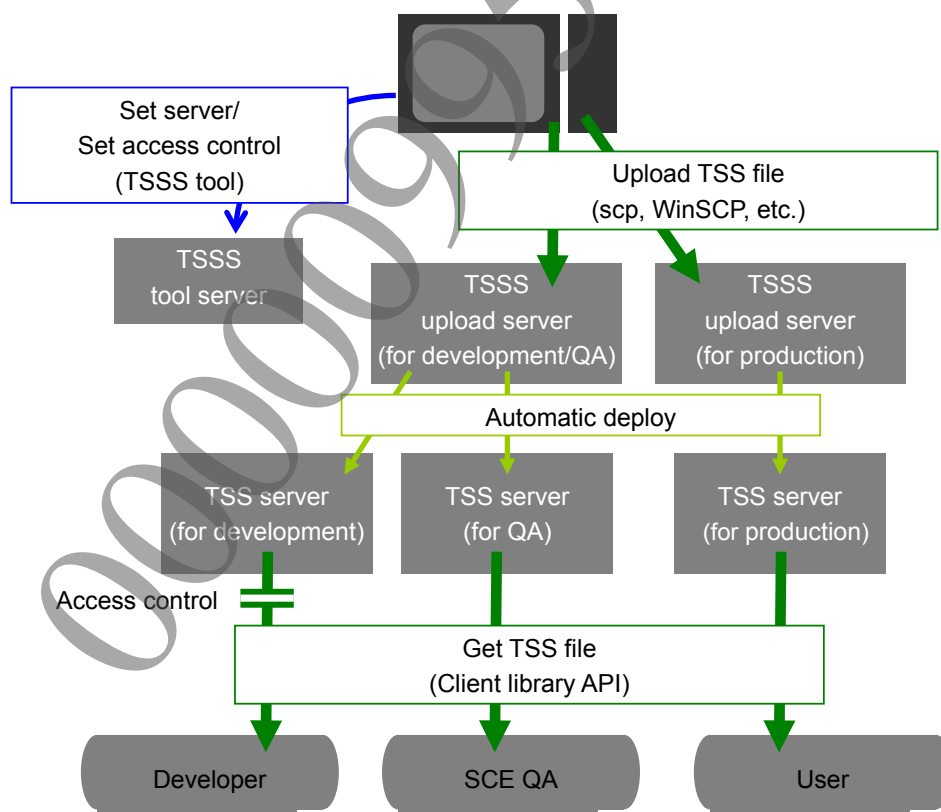
3 TSSS Tool

Access the TSSS Tool

Like the other SMT related tools, the TSSS tool is a web-based tool to be accessed via the SMT Portal.

Access the SMT Portal from a web browser. Open the screen for selecting an NP Communication ID tool. Select the NP Communication ID and environment (server), and select the TSSS tool. Click on the [submit] button. The top menu of the TSSS tool will be displayed, as follows.

Figure 2 Top Menu of the TSSS Tool
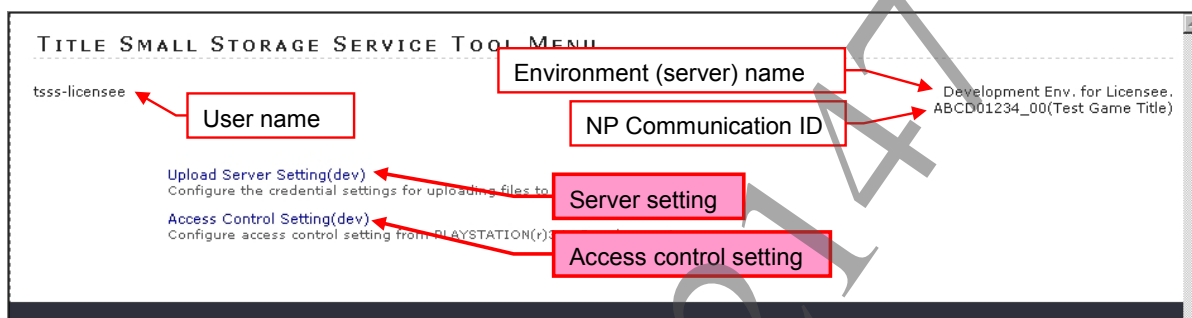
The top menu of the TSSS tool displays the user name, environment name, and the NP Communication ID.

Click on the [Upload Server Setting] link to move to the screen for making settings related to the TSSS upload server.

Click on the [Access Control Setting] link when the development environment (Development Env. for Licensee) is selected, to move to the screen for making access privilege settings to the TSS server for development.

Note
The applicable server differs between the development environment (Development Env. for Licensee) and the production environment (Production Env.). Note that the accounts for uploading files and the keys required to authenticate uploads, are managed separately per server.
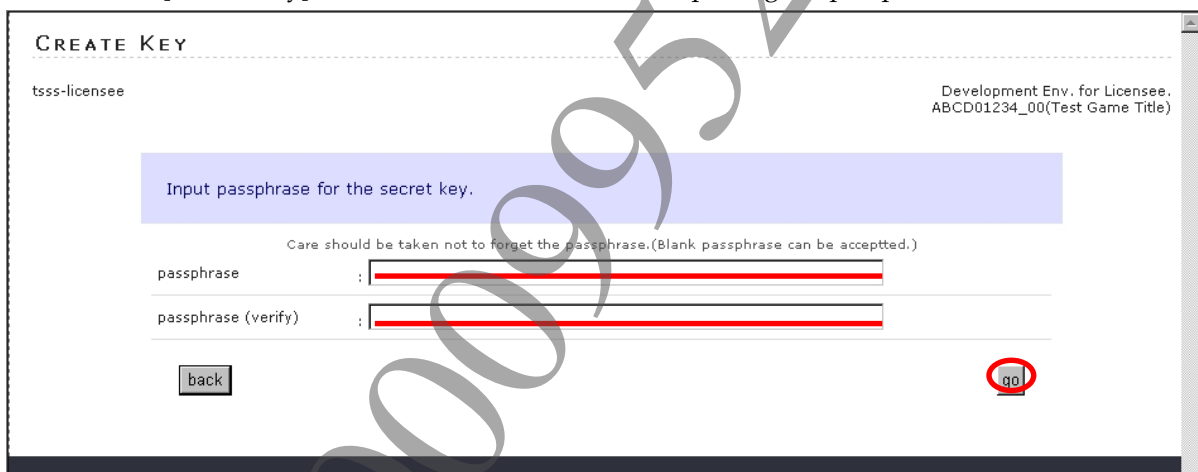
Make Server Settings

Click on the [Upload Server Setting] link in the top menu of the TSSS tool to move to the screen for making settings to the TSSS upload server.

(1) Create the key

When the screen for making settings to the TSSS upload server is first displayed, only the [Create Key] link is displayed, as follows.
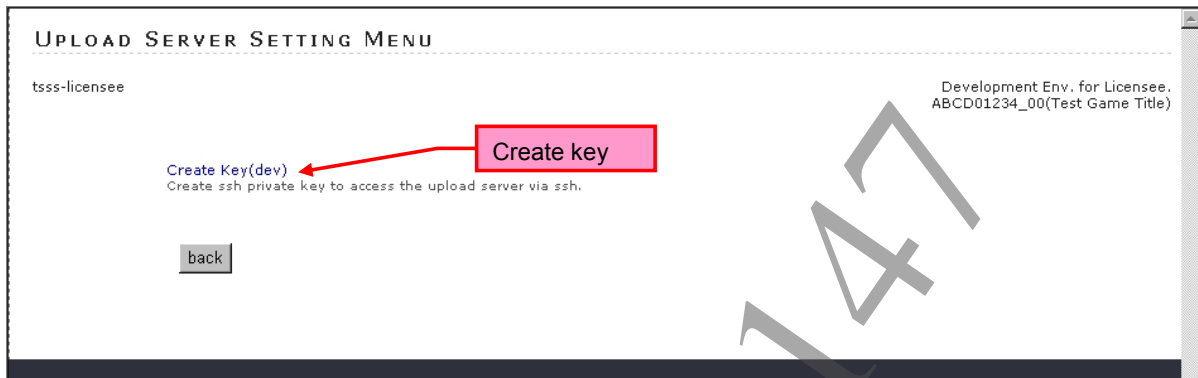
Click on the [Create Key] link to move to the screen for inputting the passphrase, as follows.

Enter an arbitrary passphrase to the [passphrase] and [passphrase(verify)] fields, and click on the [go] button. A key will be created and the screen display will be as follows.
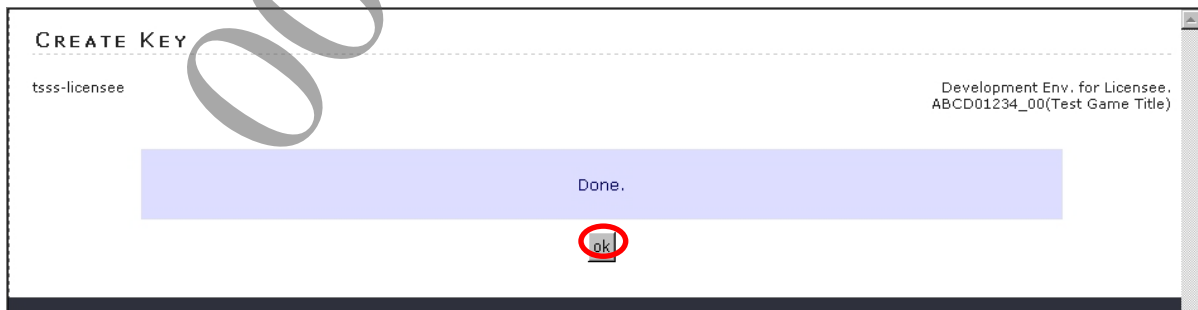
Click on the [ok] button to return to the top menu of the TSSS tool.

(2) Obtain key and server information

When clicking on the [Upload Server Setting] link after creating a key, the screen for making settings to the TSSS upload server displays the following.

Figure 3 TSSS Upload Server Setting Screen
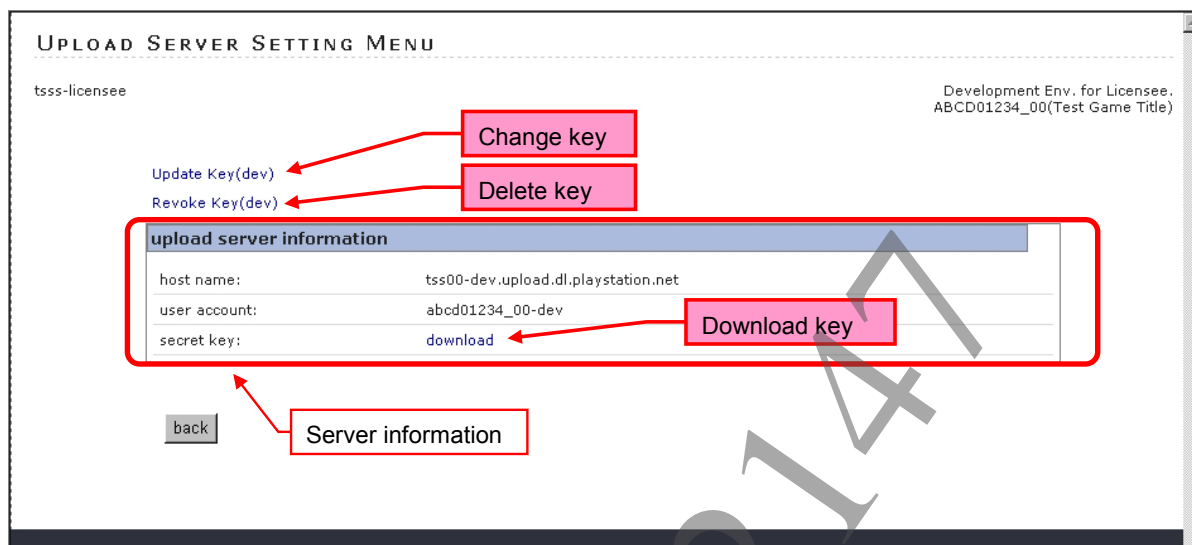
Click on the [Update Key] link to change the key.

Click on the [Revoke Key] link to delete the key.

The [upload server information] section displays the hostname of the TSSS upload server, and the account name for accessing it. Click on the [download] link to download the key required for authentication.

Download Key

Click on the [download] link in the screen for making settings to the TSSS upload server. Enter an appropriate filename in the download dialog. The key will be saved in this file.

Change Key

Change the key following the procedure below, as necessary. The current key is invalidated with this procedure.

Click on the [Update Key] link in the screen for making settings to the TSSS upload server. The screen display will be as follows.

Enter the new passphrase in the [passphrase] and [passphrase(verify)] fields and click on the [go] button. The key will be changed accordingly and the screen display will be as follows.
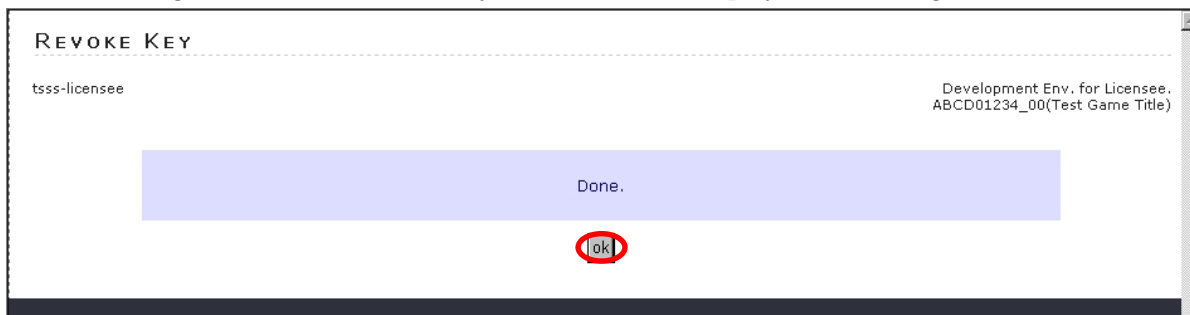

Click on the [ok] button to return to the top menu of the TSSS tool.

Delete Key

Delete the key as necessary. If a key is deleted, this means that a valid key no longer exists, and access to the TSSS upload server can be prohibited.

Click on the [Revoke Key] link in the screen for setting the TSSS upload server. The following screen will be displayed.

Click on the [go] button to delete the key. The screen will display the following.
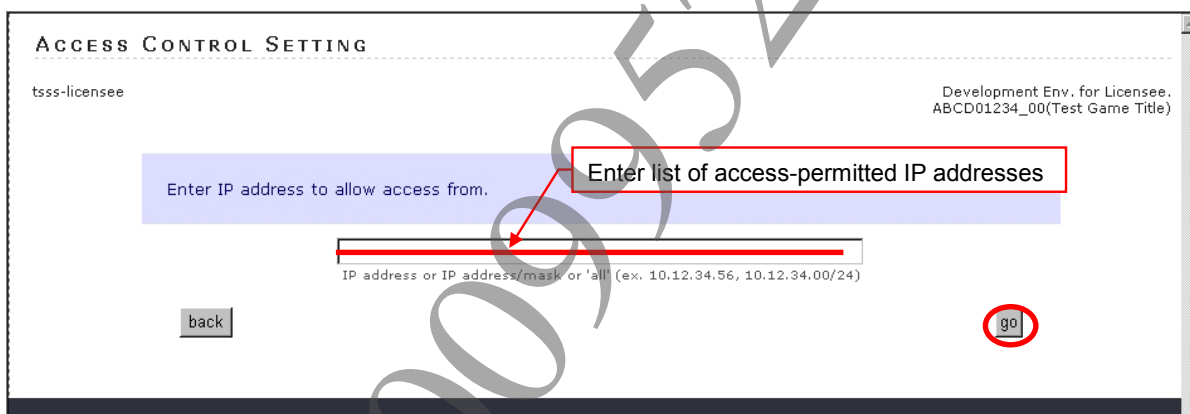
REVOKE KEY

tsss-licensee

Development Env. for Licensee.
ABCD01234_00(Test Game Title)

Done.

[ok]

Click on the [ok] button to return to the top menu of the TSSS tool.

Set Access Control

Settings can be made to the TSS server for development to limit accesses to certain IP addresses (access from any IP address is prohibited by default).

Click on the [Access Control Setting] link at the top menu of the TSSS tool to move to the screen for setting the access control, as follows.

Figure 4 Access Control Setting Screen

ACCESS CONTROL SETTING

tsss-licensee

Development Env. for Licensee.
ABCD01234_00(Test Game Title)

Enter IP address to allow access from.

Enter list of access-permitted IP addresses

IP address or IP address/mask or 'all' (ex. 10.12.34.56, 10.12.34.00/24)

back   go

Enter the IP addresses or the bit masks for the IP addresses to permit access to the TSS server for development. Use commas for separation (the entered string must be within 1000 characters including the commas and spaces).

Example

192.0.2.1

Example

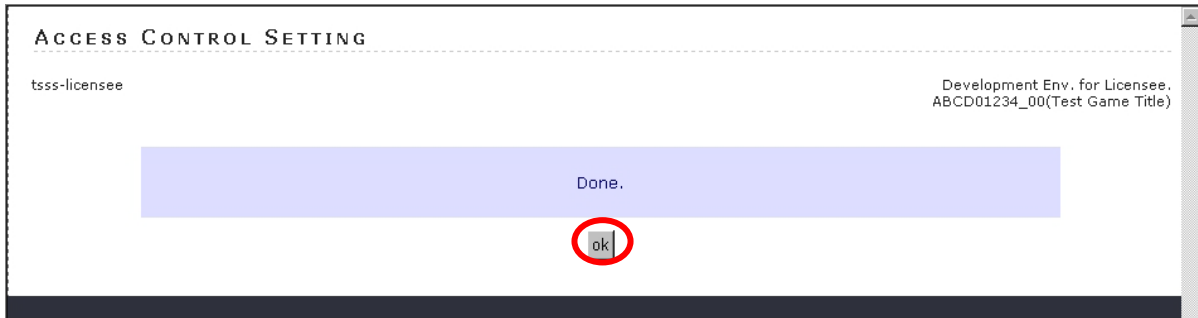192.0.2.10, 192.0.2.14, 192.0.2.15

Example

192.0.2.0/24

Specify "all" to allow any IP address to access the TSS server for development. Delete the list of access-permitted IP addresses (leave the field blank and click on the [go] button) to prohibit all accesses to the TSS server for development.

Click on the [go] button to set the access control. The screen display will be as follows.

Click on the [ok] button to return to the top menu of the TSSS tool.

Note that it may take approximately 30 minutes for the set access control to take effect.

4 Uploading a TSS File

Requirements of a TSS File

The filename and file size of a TSS file must comply with the following requirements.

Filename

NP Communication ID-slot.tss

Example: ABCD01234_00-15.tss

With PlayStation®4/PlayStation®3/PlayStation®Vita, a value from 0 to 15 can be specified for the slot value.

With PSP™, only 0 can be specified for the slot value.

File Size

The maximum value for the file size that can be used varies depending on the slot. The maximum size is 64 KiB for a TSS file with 0 specified for the slot. The maximum size is 4 MiB for a TSS file with 1 to 15 specified for the slot.

TSSS Upload Server

There are two TSSS upload servers, as indicated below. Specify the appropriate upload destination, and use the appropriate account name and key for it.

TSSS Upload Server for Development/QA

- This is the server onto where a TSS file to be placed on the TSS server for the development environment (Development Env. for Licensee) or on the TSS server for the QA environment (Quality Assurance Env. for SCE) should be uploaded.
- For the account name, use "*NP Communication ID*-dev".
- For the upload destination directory, use "~/dev" (for the development environment) or "~/qa" (for the QA environment).
- It will take approximately 30 minutes for the uploaded file to be placed on the TSS server.

TSSS Upload Server for Production

- This is the server onto where a TSS file to be placed on the TSS server for the production environment (Production Env.) should be placed.
- For the account name, use "*NP Communication ID*-pro".
- For the upload destination directory, use "~/pro".
- It will take approximately 60 minutes for the uploaded file to be placed on the TSS server.

Upload Operation

To upload a TSS file onto the TSSS upload server, use SCP (Secure Copy Protocol). Use port 10022.

Prepare a client application that can use the SCP. Operations of the following SCP client applications have been verified by SCE (however, please note that SCE does not provide support regarding these applications, such as, instructions on their usage).

- scp (UNIX command line tool)
- WinSCP (http://winscp.net)

(The above reference was available on May 14, 2014. Note, however, that it is possible for the applicable page to be moved or modified.)

Upload Example using the scp Command

```
$ scp TSS file  accountname@hostname:directoryname  -i  key file
```

Note
Even if the TSS file on the TSSS upload server is deleted using the SCP client application, the TSS file on the TSS server will not be deleted. To delete the TSS file on the TSS server, prepare an empty file (0-byte file) with the same filename as the TSS file to be deleted on the TSS server, and upload it onto the TSSS upload server.