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# 1 About This Document

This document describes the features and usage of the NP clans service related tools, which are a part of the Server Management Tools (SMT) provided by PSN<sup>SM</sup>.

This document first discusses the development of applications that use the NP clans service. Then the following two tools are described.

- Clans Manager Tool
   This tool is used for configuring the service settings and for modifying the data of clans and clan members.
- Clans Service Management Tool
  This tool is used for starting, pausing, resuming, and terminating the NP clans service.

These tools are available from the SMT Portal. For more information regarding the SMT Portal, refer to the documents indicated below.

Information of alleviating server loads is provided at the end of this document.

# **Reference Materials**

Refer to the following document for SMT Portal operation.

• Server Management Tools Portal User's Guide

Refer to the following documents for the client libraries for using the NP clans service.

• NP Clans Overview, NP Clans Reference



# **2** Application Development

This chapter outlines the procedure for developing applications that use the NP clans service.

# Registration

First, apply for the NP clans service when registering an NP Communication ID throught the PlayStation®3 Developer Network (<a href="https://ps3.scedev.net/">https://ps3.scedev.net/</a>). Also specify the following setting at this time.

## No Approval Required

It is possible to allow users to join a clan freely without the leader or subleader's approval. The default settings require approval, which means that to join a clan, a join request must be approved or an invitation accepted. If the settings of the clan are configured to "no approval required", a user can join a clan as soon as scenpclansJoinClan() is executed.

# **Service Settings**

Then, use the Clans Manager Tool to configure the basic service settings for clans as required in the title. The following items can be configured.

#### **Allow Leader Leave**

This setting indicates whether or not a leader is allowed to leave the clan. If the leader is allowed to leave, the clan will automatically disband when the leader leaves. If the leader is not allowed to leave, the leader must always transfer this role to another clan member before leaving the clan.

The default settings allow the leader to leave a clan.

# **Clan Creation Interval**

When clans are created and disbanded frequently, it is possible to run out of clan names and tags. To delay the emergence of such a situation, a user is not allowed to create a new clan soon after creating a clan, even if that clan is disbanded. This setting indicates the time the user must wait before creating another clan. The default setting is 30 days.

#### **Max Member Count**

This is the maximum number of members allowed in a clan. The possible range is 2 to 256.

#### Max Clan Create Count

This is the maximum number of clans one user is allowed to create and lead (the user who creates a clan automatically becomes the leader). This limit actually applies not only to the clans created by the user, but also the clans originally created by other users (when the leader role is inherited). The possible range is 1 to 3.

#### Max Clan Join Count

This is the maximum number of clans one user can join. The possible range is 1 to 5.

#### **Max Announce Limit**

This is the maximum number of messages allowed on the bulletin board. The possible range is 1 to 20.

#### **Max Challenge Limit**

This is the maximum number of messages allowed on the challenge board. The possible range is 1 to 20.

# Note

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The maximum number of clans that can be created for one NP Communication ID is fixed at 10000 and cannot be changed.

#### Note

Contact SCE when considering any values exceeding the maximums indicated here.

# **Application Development and Testing**

Develop the application using the API provided in the NP clans utility.

Clan data and clan member data will be registered to the server according to the API calls. The Clans Manager Tool can then be used to view and edit the data currently registered on the server, and it can also be used to create, modify, and delete clan and clan member data. This allows the application to be tested under various conditions. In particular, the following tests must always be carried out.

#### **Operation Tests with Banned Users**

It is possible to ban specific users from using the NP clans service for that NP Communication ID, in case there are abuses by the user. Use the Clans Manager Tool to register a test account to the banned user list and check the behavior of the application when the banned user attempts to access the service.

## **Operation Tests with the Service Status**

The NP clans service has a status (in service/service has not started/service has ended/in maintenance). Use the Clans Service Management Tool to change the service status and check the behavior of the application under the different service statuses.

# Submission to QA

When the application is ready for submission as a master disc or master package, submit it to QA through the PlayStation®3 Developer Network.

# 3 Clans Manager Tool

The Clans Manager Tool is used in the testing of application behavior using the NP clans service. It can change the service configuration and the registered data of clans and clan members. This chapter describes the Clans Manager Tool.

#### Main Menu

Access the SMT Portal using a web browser, select the NP Communication ID and environment in the NP Communication ID Tool Selection screen, and launch the Clans Manager Tool. The following Clans Manager Tool main menu will appear.

#### Note

If the user only has Read-Only privileges and no update privileges, the registered data can be displayed but not modified. It is assumed here that the user has update privileges.

CLANS MANAGER TOOL iwade Environment Label AAA ST00000\_00(NP Communication ID Label AAA) Check the data registered for clans Menu Register and edit clan data Check the data registered for members View/Edit Clan Information Register and edit member data 2. View/Edit Member Information 3. View/Edit Configuration Edit service settings Banned User Edit Edit banned users Return Top © 2007 Sony Computer Entertainment Inc. All rights reserved.

Figure 1 Clans Manager Tool Main Menu

Click on the [View/Edit Clan Information] link to display the Clan Lookup screen. In this screen, clan data can be searched, added, modified, and deleted.

Click on the [View/Edit Member Information] link to display the Clan Member Lookup screen. In this screen, clan member data can be searched, added, modified, and deleted.

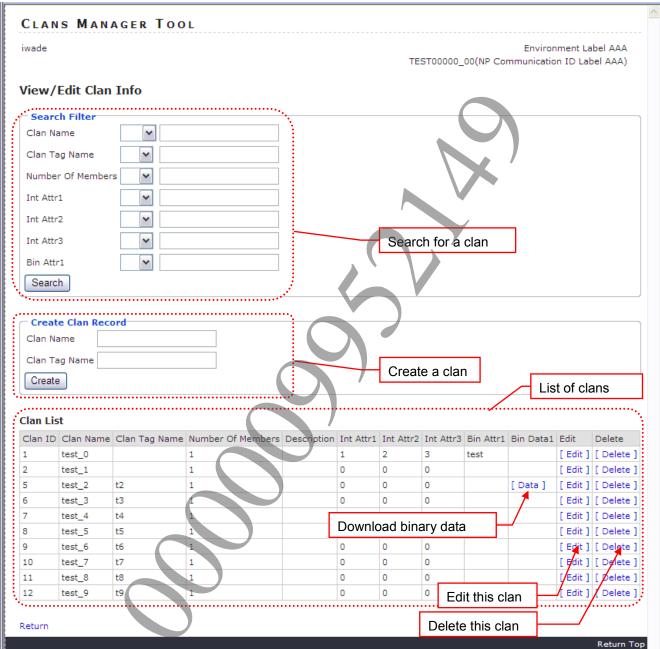
Click on the [View/Edit Configuration] link to display the Service Configuration Edit screen. In this screen, service settings can be viewed and modified.

Click on the [Banned User Edit] link to display the Banned User Edit screen. In this screen, it is possible to ban (and unban) users.

# **Create and Delete Clans**

Click on the [View/Edit Clan Information] link in the Clans Manager Tool main menu to display the Clan Lookup screen.

Figure 2 Clan Lookup Screen



The Clan Lookup screen is composed of the following three areas.

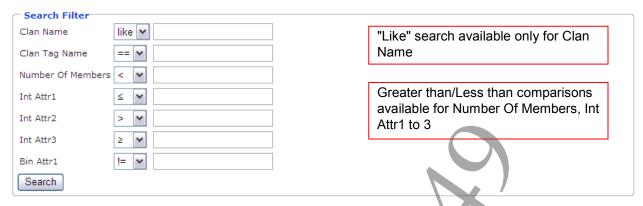
- Search Filter area to search for clans
- Create Clan Record area to create clans
- Clan List area to display a list of clans

Click on the [Return] link to return to the Clans Manager Tool main menu.

# Search for Clans (Search Filter Area)

In the default state, all clans will be displayed in the Clan List area. When search conditions are specified in the Search Filter area, this list can be narrowed down.

Figure 3 Search Filter Area



The following seven search conditions can be specified. Multiple conditions specify an AND search.

- Clan Name: Name of the clan (== != like)
- Clan Tag Name: Tag (abbreviated name) of the clan (== !=)
- Number Of Members: Number of members in the clan (==  $!= < \le > \ge$ )
- Int Attr1: Integer-type attribute 1 (==  $!= < \le > \ge$ )
- Int Attr2: Integer-type attribute 2 (== != < ≥ ≥ ≥)
- Int Attr3: Integer-type attribute 3 (== != < ≦ > ≧)
- Bin Attr1: Binary-type attribute 1 (== !=)

Click on the [Search] button to display the clans matching the specified conditions. If there are no search conditions specified, all existing clans will be displayed in the Clan List area.

## Create a Clan (Create Clan Record Area)

In the Create Clan Record area, clans can be created by specifying the clan name and clan tag.

Figure 4 Create Clan Record Area



Click on the [Create] button to create a clan with the specified clan name and clag tag, and whose owner is a user with a random ID. This clan will be displayed in the Clan List area. (At this time, all search conditions will be voided, and all existing clans will be displayed.)

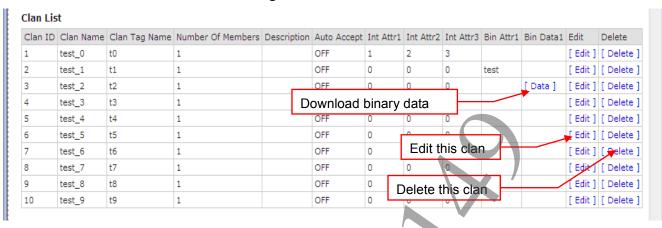
Clan attributes cannot be specified at this time but can be modified later in the Clan Edit screen.

# List of Clans (Clan List Area)

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In the Clan List area of the Clan Lookup screen, the clans matching the conditions specified in the Search Filter area will be displayed.

Figure 5 Clan List Area



- Clan ID: ID of the clan
- Clan Name: Name of the clan
- Clan Tag Name: Tag (abbreviated name) of the clan
- Number Of Members: Number of members in the clan
- Description: Description of the clan
- Auto Accept: Flag for automatically accepting join-in requests
- Int Attr1: Integer-type attribute 1
- Int Attr2: Integer-type attribute 2
- Int Attr3: Integer-type attribute 3
- Bin Attr1: Binary-type attribute 1
- Bin Data1: Link for downloading binary data. There will be no link if binary data does not exist for that clan.

Click on the [Data] link to download the clan's binary data.

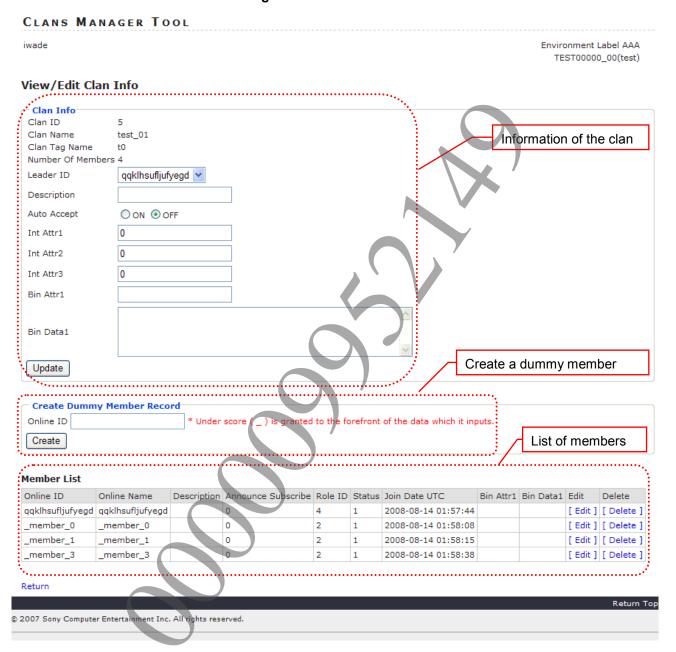
Click on the [Edit] link to move to the Clan Edit screen and modify the clan's attributes.

Click on the [Delete] link to delete the clan.

#### **Edit Clan Information**

Click on the [Edit] link in the Clan List area of the Clan Lookup screen to move to the Clan Edit screen and view or modify the clan's attributes.

Figure 6 Clan Edit Screen



The Clan Edit screen is composed of the following three areas.

- Clan Info area to edit the attributes of the clan
- Create Dummy Member Record area to create dummy clan members
- Member List area to display a list of clan members

Click on the [Return] link to return to the Clan Lookup screen.

## Edit a Clan (Clan Info Area)

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- Clan ID: ID of the clan (cannot be modified)
- Clan Name: Name of the clan (cannot be modified)
- Clan Tag Name: Tag (abbreviated name) of the clan (cannot be modified)
- Number Of Members: Number of members in the clan (cannot be modified)
- Leader ID: Online ID of the clan leader. It can be selected from the current clan members.
- Description: Description of the clan
- Auto Accept: Flag for automatically accepting join-in requests
- Int Attr1, Int Attr2, Int Attr3: Integer-type attributes. There are three altogether, and each can have a positive integer value (uint32\_t).
- Bin Attr1: Binary-type attribute. Set a string encoded in Base64. The data can be a maximum of 190 bytes before encoding to Base64.
- Bin Data1: Binary data. Set a string encoded in Base64. The data can be a maximum of 10240 bytes before encoding to Base64.

Enter the new information and click on the [Update] button to refresh the clan's information.

# Create a Dummy Clan Member (Create Dummy Member Record Area)

In the Create Dummy Member Record area, dummy clan members can be created by specifying the Online ID.

Figure 7 Create Dummy Member Record Area



Click on the [Create] button to register the user with the specified ID as a dummy member of the clan, and display the dummy member in the Member List area.

The attributes of a dummy clan member cannot be specified at this time but can be modified later in the Clan Member Edit screen.

#### Note

An underscore (\_) is added automatically as a prefix to the Online ID and Online Name of dummy clan members.

#### List of Clan Members (Member List Area)

In the Member List area of the Clan Edit screen, a list of clan members will be displayed.

- Online ID: ID of the clan member
- Online Name: Name of the clan member
- Description: Description of the clan member
- Announce Subscribe: Announcement subscription flag
- Role ID: Current role. (1: Not a member, 2: Member, 3: Subleader, 4: Leader)
- Status: Current status. (1: Member, 2: Invited, 3: Pending approval)
- Join Date UTC: Date/time the clan member joined the clan. The date/time is in UTC (Coordinated Universal Time).
- Bin Attr1: Binary-type attribute 1
- Bin Data1: Link for downloading binary data. There will be no link if binary data does not exist.

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Click on the [Data] link to download the clan member's binary data.

Click on the [Edit] link to move to the Clan Member Edit screen and modify the clan member's attributes (updatable information).

Click on the [Delete] link to delete the clan member.

#### **Edit Clan Member Information**

Click on the [Edit] link for a clan member in the Member List area of the Clan Edit screen to move to the Clan Member Edit screen and view or modify the clan member's attributes.

Figure 8 Clan Member Edit Screen



Click on the [Return] link to return to the Clan Edit screen.

Enter the new information and click on the [Update] button to refresh the clan member's information.

- Clan ID: ID of the clan to which the member belongs (cannot be modified)
- Online ID: ID of the clan member (cannot be modified)
- Join Date UTC: Date/time the clan member joined the clan (cannot be modified). The date/time is in UTC (Coordinated Universal Time).
- Online Name: Name of the clan member.
- Description: Description of the clan member.
- Announce Subscribe: Announcement subscription flag
- Role ID: This value indicates the current role. The leader role cannot be modified. The roles of other members can be changed to 1: Not a member, 2: Member, or 3: Subleader.
- Status: This value indicates the current status. The status can be changed to 1: Member, 2: Invited, or 3: Pending approval.

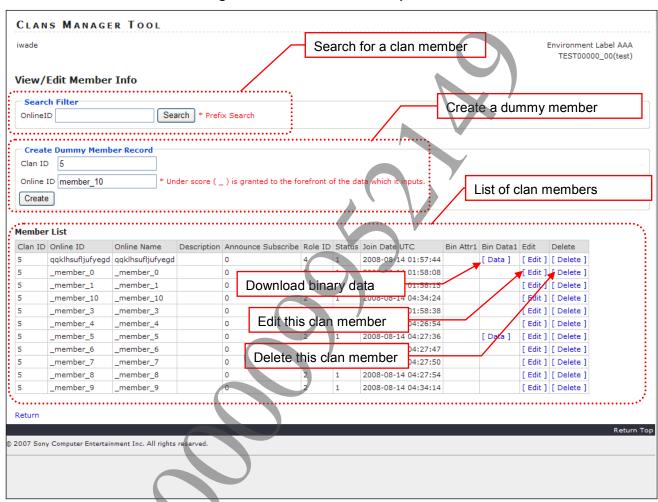
- Bin Attr1: Value of binary-type attribute 1. Set a string encoded in Base64. The data can be a maximum of 16 bytes before encoding to Base64.
- Bin Data1: Value of binary data. Set a string encoded in Base64. The data can be a maximum of 1024 bytes before encoding to Base64.

#### **Create and Delete Clan Members**

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Click on the [View/Edit Member Information] link in the main menu to display the Clan Member Lookup screen.

Figure 9 Clan Member Lookup Screen



The Clan Member Lookup screen is composed of the following three areas.

- Search Filter area to search for clan members
- Create Dummy Member Record area to create dummy clan members
- Member List area to display a list of clan members

Click on the [Return] link to return to the main menu.

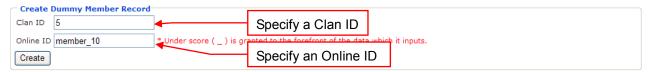
#### **Search for Clan Members**

Enter part of an Online ID to narrow down the list of clan members. Type in a string and click on the [Search] button to display a list of clan members whose Online IDs start with the input string. If nothing is entered, all registered clan members will be displayed in the list.

#### **Create a Dummy Clan Member**

In the Create Dummy Member Record area, dummy clan members can be created by specifying the clan ID and the Online ID.

Figure 10 Create Dummy Member Record Area



Click on the [Create] button to register the user with the specified ID as a dummy member of the specified clan. The user will now be displayed in the Member List area.

The attributes (updatable information) of a dummy clan member cannot be specified at this time but can be modified later in the Clan Member Edit screen.

#### Note

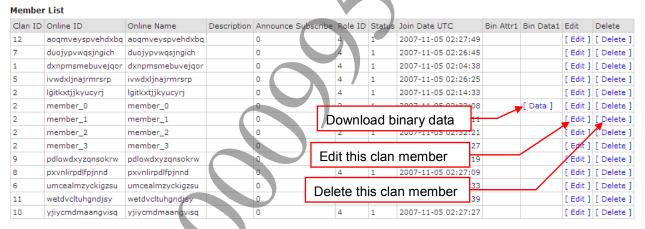
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An underscore (\_) is added automatically as a prefix to the Online ID and Online Name of dummy clan members.

# **List of Clan Members**

In the Member List area of the Clan Member Lookup screen, a list of clan members will be displayed.

Figure 11 Member List Area



- Clan ID: ID of the clan
- Online ID: ID of the clan member
- Online Name: Name of the clan member
- Description: Description of the clan member
- Announce Subscribe: Announcement subscription flag.
- Role ID: Current role. (1: Not a member, 2: Member, 3: Subleader, 4: Leader)
- Status: Current status. (1: Member, 2: Invited, 3: Pending approval)
- Join Date UTC: Date/time the clan member joined the clan. The date/time is in UTC (Coordinated Universal Time).
- Bin Attr1: Value of binary-type attribute 1
- Bin Data1: Link for downloading binary data. There will be no link if binary data does not exist.

Click on the [Data] link to download the clan member's binary data.

Click on the [Edit] link to move to the Clan Member Edit screen and modify the clan member's attributes.

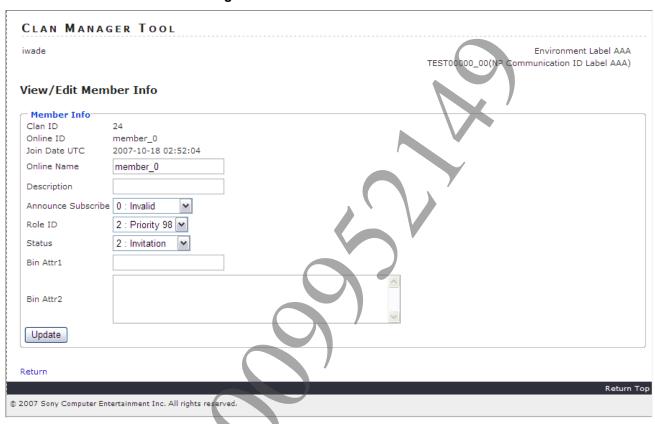
Click on the [Delete] link to delete the clan member.

#### **Edit Clan Member Information**

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Click on the [Edit] link in the Clan Member Lookup screen to move to the Clan Member Edit screen and view or modify the clan member's attributes.

Figure 12 Clan Member Edit Screen



Click on the [Return] link to return to the Clan Member Lookup screen.

Enter the new information and click on the [Update] button to refresh the clan member's information.

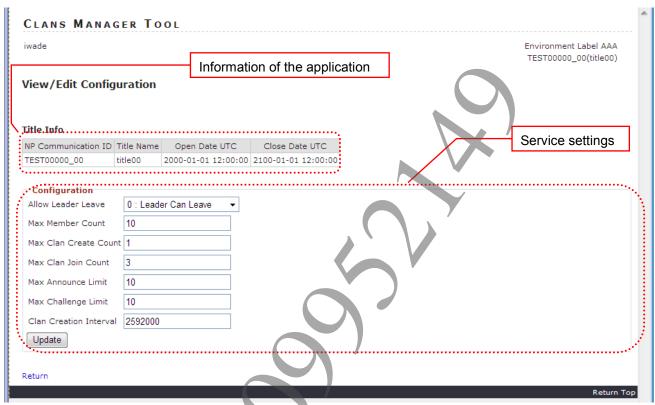
- Clan ID: ID of the clan to which the clan member belongs (cannot be modified)
- Online ID: ID of the clan member (cannot be modified)
- Join Date UTC: Date/time the clan member joined the clan (cannot be modified). The date/time is in UTC (Coordinated Universal Time).
- Online Name: Name of the clan member
- Description: Description of the clan member
- Announce Subscribe: Announcement subscription flag
- Role ID: This value indicates the current role. The leader role cannot be modified. The roles of other members can be changed to 1: Not a member, 2: Member, or 3: Subleader.
- Status: This value indicates the current status. The status can be changed to 1: Member, 2: Invited, or 3: Pending approval.
- Bin Attr1: Value of binary-type attribute 1. Set a string encoded in Base64. The data can be a maximum of 16 bytes before encoding to Base64.

• Bin Data1: Value of binary data. Set a string encoded in Base64. The data can be a maximum of 10240 bytes before encoding to Base64.

# **Edit Service Configuration**

Click on the [View/Edit Configuration] link in the Clans Manager Tool main menu to display the Service Configuration Edit screen with information of the application and its service settings.

Figure 13 Service Configuration Edit Screen



## **Title Info Area**

Information of the title includes the NP Communication ID, title name, and the date/time the service will start and end. This information is registered in the application for the NP clans service and cannot be changed afterwards.

#### Note

The date/time the service will start/end cannot be changed, but the behavior of the application before the service is started and after the service ends can be tested by changing the service status using the Clans Service Management Tool.

# **Configuration Area**

The following information will be displayed for the NP clans service configuration.

- Allow Leader Leave: Allowing the clan leader to leave
- Max Member Count: Maximum number of members in a clan
- Max Clan Create Count: Maximum number of clans of which a user can become the leader. This limit
  applies not only to the clans created by the user, but also clans created by other users, from whom
  the leader role is transferred
- Max Clan Join Count: Maximum number of clans a user can join
- Max Announce Limit: Maximum number of announcements for a clan

- Max Challenge Limit: Maximum number of challenges a clan can make to other clans
- Clan Creation Interval: Number of seconds a user must wait before creating another clan (timeout after creating a clan)

Click on the [Update] button to refresh the service settings.

#### Note

After registration to QA, the service configuration cannot be modified. The following message will appear if this is attempted.

Configuration edit has been disabled since QA server registration has been requested for this title.

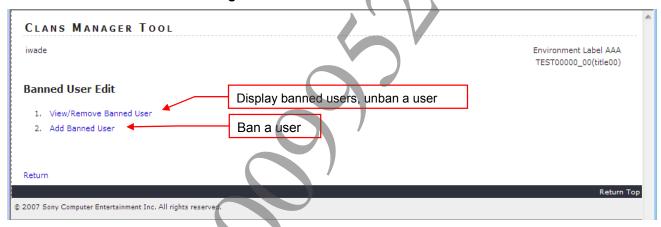
If it is necessary to change the configuration after QA registration, contact SCE.

# **Edit Banned Users**

Click on the [Banned User Edit] link in the Clans Manager Tool main menu to move to the Banned User Edit screen.

A banned user is a user who is banned from using the NP clans service. This feature blocks specific user accounts for that NP Communication ID in case there are any abuses. The list of banned users can be edited in order to test the behavior of the application when a banned user attempts an access.

Figure 14 Banned User Edit Screen



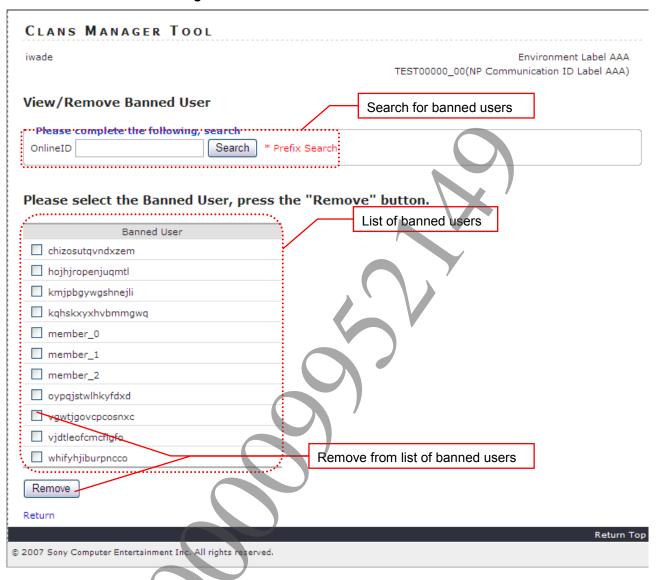
Click on the [View/Remove Banned User] link to move to the View/Remove Banned User screen.

Click on the [Add Banned User] link to move to the Add Banned User screen.

#### **View and Remove Banned Users**

Click on the [View/Remove Banned User] link in the Banned User Edit screen to display the list of banned users.

Figure 15 View/Remove Banned User Screen



Click on the [Return link to return to the Banned User Edit screen.

# **Search for Banned Users**

Enter part of an Online ID to narrow down the list. Type in a string and click on the [Search] button to display the list of banned members whose Online IDs start with the input string. If nothing is entered, all banned users will be displayed in the list.

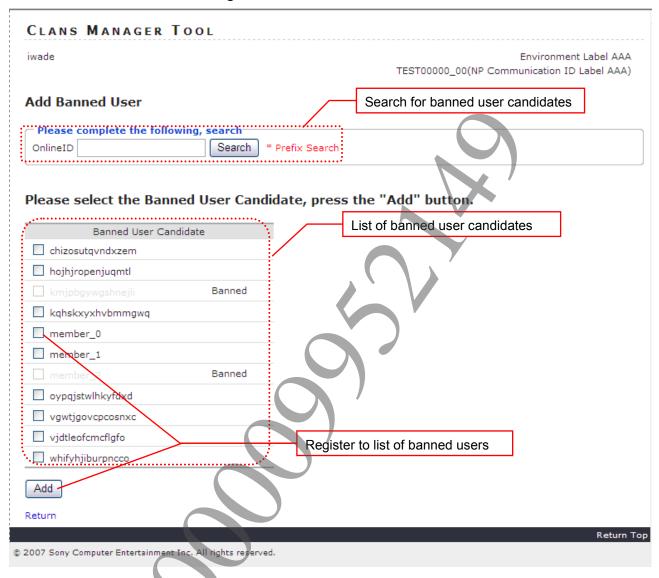
#### **Remove Banned Users**

Tick the checkbox to the left of the Online ID in the list of banned users, and click on the [Remove] button to lift the ban on the user.

#### **Add Banned Users**

Click on the [Add Banned User] link in the Banned User Edit screen to move to the Add Banned User screen.

Figure 16 Add Banned User Screen



Click on the [Return] link to move to the Banned User Edit screen.

# **Search for Banned User Candidates**

Enter part of an Online ID to narrow down the list. Type in a string and click on the [Search] button to display the list of clan members whose Online IDs start with the input string. If nothing is entered, all clan users will be displayed in the list.

#### **Add Banned Users**

Tick the checkbox to the left of the Online ID in the list of clan members, and click on the [Add] button to ban the user from using the NP clans service.

# 4 Clans Service Management Tool

The Clans Service Management Tool is used to start, pause, resume, and terminate the NP clans service. It can be used during development in the testing of application behavior under the different service statuses.

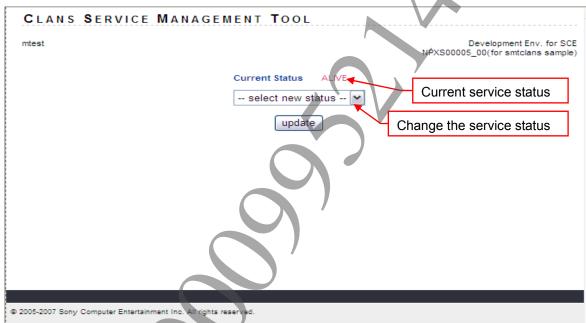
#### Main Menu

Access the SMT Portal using a web browser, select the NP Communication ID and environment in the NP Communication ID Tool Selection screen, and launch the Clans Service Management Tool. The following Clans Service Management Tool main menu will appear.

#### Note

If the user only has Read-Only privileges and no update privileges, the registered data can be displayed but not modified. It is assumed here that the user has update privileges.

Figure 17 Clans Service Management Tool Screen



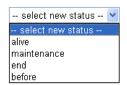
# **Current Service Status**

The status of the NP clans service for the NP Communication ID is displayed.

# **Modifying the Service Status**

When the user has update privileges, a dropdown list of service statuses and the [update] button will be enabled.

Figure 18 NP Clans Service Status



The following service statuses can be selected.

• alive: Service is available

• maintenance: Service is in maintenance

• end: Service has not yet started

• before: Service has already ended

Select one of the statuses and click on the [update] button to refresh the service status, which will be reflected immediately on the server.



# **5** Server Loads in Clan Lookups

Searches for clans can exert large server loads and should be carried out carefully with the following points in mind.

# **Calling API**

The following two API exert great loads on the server. This becomes particularly pertinent as the number of clans increases.

Function	Description
<pre>sceNpClansSearchByProfile()</pre>	Find clans with the specified attributes
<pre>sceNpClansSearchByName()</pre>	Find clans with the specified name

Call these API only upon receiving specific user instruction. Avoid calling these API in loops as in "for" and "while" statements.

#### **Search Conditions**

When calling the above two API, specify search conditions that will narrow down the list effectively. If the search conditions are not precise, the results will be numerous and processing may time out. As much as possible, use == operations, instead of just greater than/less than comparisons or != operations.

#### Note

Contact SCE regarding search conditions and other questions regarding lookups.

