near System Overview

PlayStation®Vita Programmer Tool Runtime Library Release 3.50

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1 Introduction

Structure of this Document

The "near" system enables the use of the various services in games, such as, the distribution of game data among users and the search of other users who are near the owner.

This document gives an overview of the "near" system in the following order.

- "near" Game Service Overview
  An overview of the "near" game service realized by the "near" system is given in Chapter 2.
- "near" Application Overview
  An overview of the "near" application that focuses on the features that can be used from game programs is given in Chapter 3.
- "near" Game Service Data Details
  Items (only gifts are available as items in this version) are data which a game program can send and receive through the "near" game service. Items are described in Chapter 4.
- Notes
  Precautions to be taken in using the "near" game service, the "near" utility, and the "near" Dialog utility are listed in Chapter 5.
- Notes on PlayStation®TV
  Points to note when using the "near" system with PlayStation®TV are explained in Chapter 6.
- FAQ
  Frequently asked questions are answered in Chapter 7.

2 "near" Game Service Overview

"near" Game Service

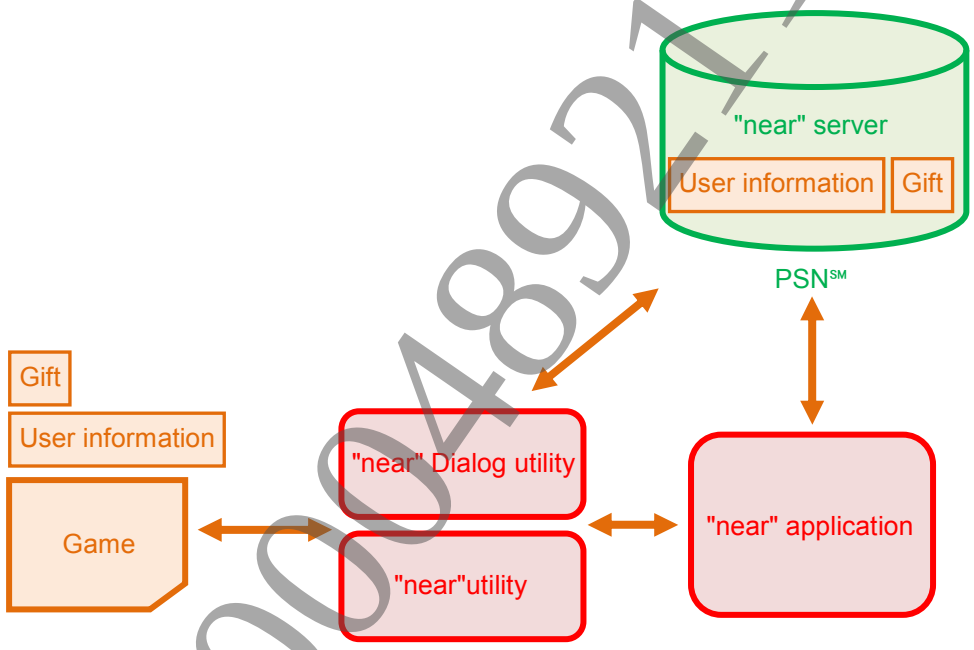
The "near" game service enables the sending/receiving of data between users through the communication of the "near" application installed on the system software with the "near" server, or through the communication of the "near" Dialog utility (called from the game) with the "near" server.

The "near" game service mainly provides the following services.

- Distributing and receiving gift data
- Obtaining information on nearby users
- Obtaining the usage status of the "near" application

The "near" game service is realized by the "near" system below.

Figure 1 "near" System



"near" server

This is a server on PSN℠ used by the "near" game service. The "near" game service is realized through "near" servers that circulate item data registered by game titles among users.

"near" application

This is an application installed by default on the system software. This application uses the location information library, friends, and "near" server to find nearby users and the game titles played recently by them. Game programs can use the "near" utility/"near" Dialog utility to register the gift data to be uploaded to the "near" server on the "near" application. Gift data is uploaded to the "near" server when the "near" application communicates with the "near" server. Moreover, gift data uploaded from a game program to the "near" server that is played by a nearby user or friend can also be downloaded.

"near" utility

This is a library that enables the transfer of various types of data between the "near" application and a game program.

"near" Dialog utility

In addition to features of the "near" utility, the "near" Dialog utility provides features to communicate with the "near" server from within the game using the Common Dialog feature and without having to start up the "near" application.

Gift

A gift, is the name of game data distributed/received among users using the "near" game service.

Nearby user

Users found in one's vicinity with the "near" game service are called "nearby users". A user's location information can be stored on the "near" server for up to 1 week; therefore, the term "nearby user" in the "near" game service indicates users who are currently in a place's vicinity or were there during the past week.

Types of Data Used by the "near" Game Service

The types of data that can be used by a game program in the "near" game service are as follows:

- Gift
- Online ID of a nearby user
- Usage status of the "near" application

Only one distribution gift can be set in the system software at a time per game program.

When a new gift for distribution is registered, gifts set in the past will be overwritten and deleted.

Details on Nearby Users

By using the "near" application/"near" Dialog utility, a game program can obtain `SceNpId` of up to 100 other users near areas passed by the user. The `SceNpId` of users discovered to most-recently be near the user will be prioritized over older detections.

Mechanism of Each Feature in the "near" Game Service

"Update" operation

"Update" operation refers to the communication between the PlayStation®Vita and the "near" server. "Update" operation is initiated in the following three ways.

- The user taps the **"near" Update** button (see Chapter 3).
- Updating is done automatically once a day when the user enables **Automatic Update** in the "near" application (the time is determined by the "near" application).
- The game program uses the "near" Dialog utility to start update processing in the dialog format. Before performing update processing, it is necessary for the game program to prompt the user to update "near" by using the Message Dialog library, and for the user to consent to update "near".

Finding Nearby Users

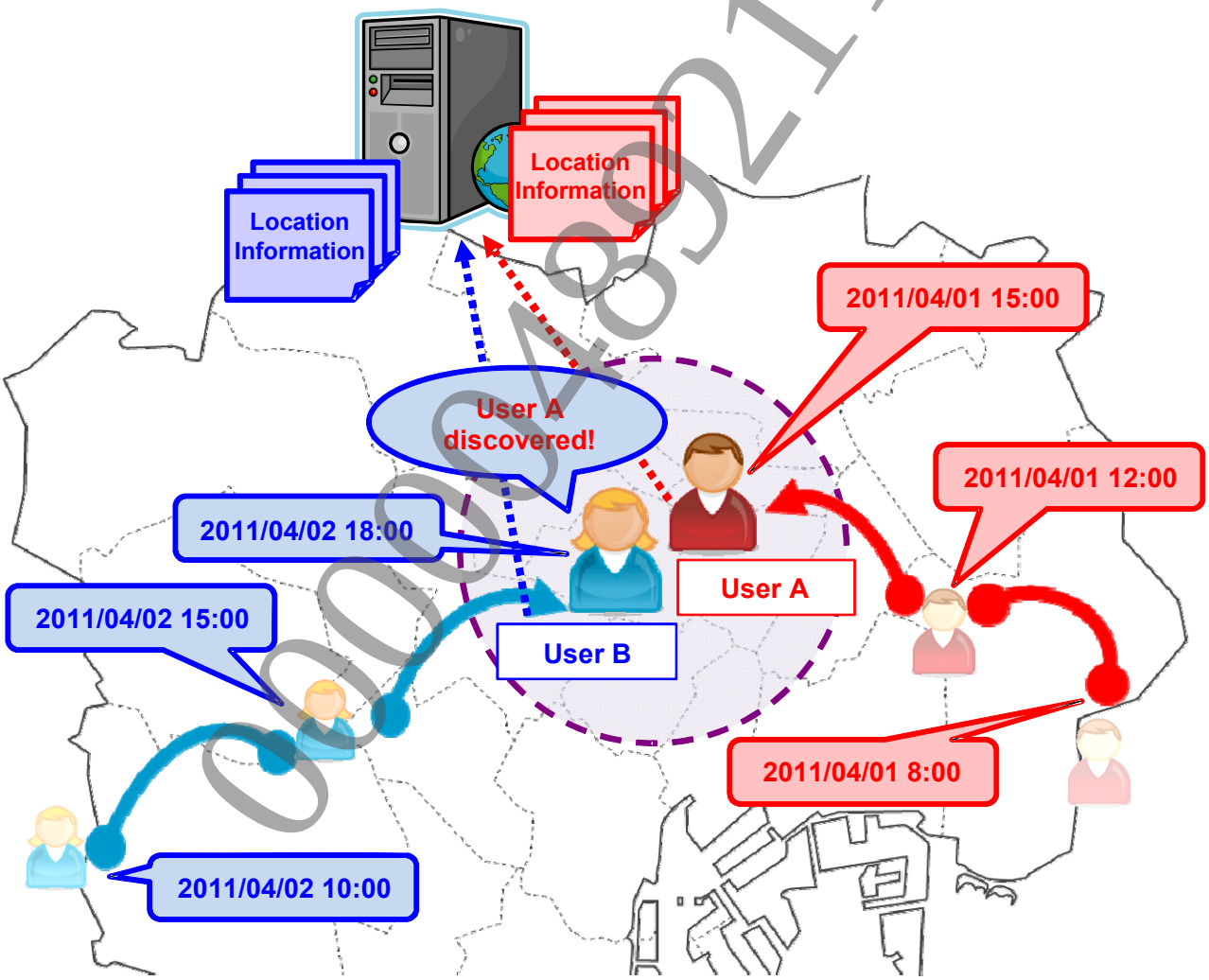
During an "Update" operation of the "near" application/"near" Dialog utility, information of up to 10 locations calculated using the location calculation library of PlayStation®Vita and the online ID are uploaded to the "near" server. The uploaded location information is kept on the server for up to one week. Moreover, during the "Update" operation, online IDs of other users near the user who uploaded the location information to the server are searched using the uploaded location information as the search key.

Through this mechanism, other users who are (were) nearby can be found by the user (going back in time for up to one week).

The "Update" operation can discover nearby users within a 15km to 25km radius of the user (exact distance depends on the location on the terrestrial surface). Up to 10 users can be searched in a specific location.

The game program can obtain the online IDs of up to 100 nearby users discovered through the above-described operation using the "near" utility/"near" Dialog utility. The online IDs of most recently discovered users' take the priority over older detections.

Figure 2 Nearby User Discovery Mechanism



Discovering and Receiving Gifts Distributed by a Nearby User

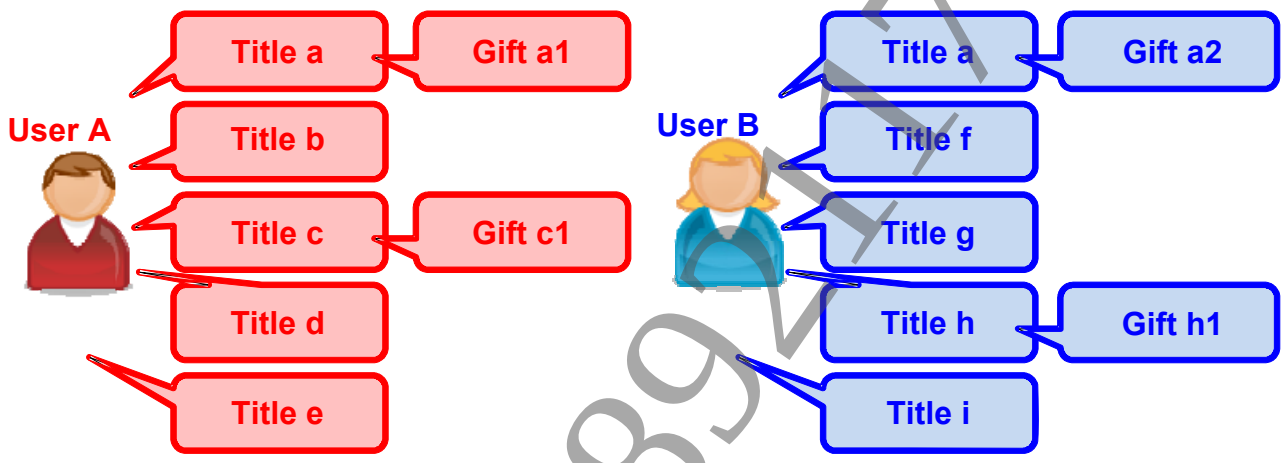
The "Most recently played game titles" for each user and the "gift data" registered by these game titles using the "near" utility/"near" Dialog utility are uploaded to the "near" server.

The "near" application/"near" Dialog utility of a user (User A below) uses the online ID of a nearby user found in the above process as a search key to find/receive gift data distributed by that user (User B below)..

The game program on the receiving side reads the gift data downloaded by the "near" application/"near" Dialog utility using the "near" utility/"near" Dialog utility.

In this way, gifts distributed by nearby users can be transferred from one user to another.

Figure 3 Gifts Distributed by a Nearby User



Discovering and Receiving Gifts Distributed by Friends

When a friend's gift is uploaded to the server, the gift can be discovered and received using the online ID of the friend as the search key.

Conditions for Item Data to Be Circulated

Item data (gift data) of game titles registered using the "near" utility/"near" Dialog utility is not circulated via the "near" game service unconditionally. From the viewpoint of the PlayStation®Vita owner, this data is distributed to the "near" game service via the "near" application/"near" Dialog utility only if the game title in question meets the conditions.

Owner

This is a user that owns PlayStation®Vita. The availability of the "near" game service is not only determined by the game title and the "near" application, but also by various conditions, including whether that game title is among those recently played by the PlayStation®Vita owner, whether the game title is deemed interesting by the PlayStation®Vita owner, and whether use of the "near" game service by that game title is not considered by the PlayStation®Vita owner to be a problem from the viewpoint of privacy.

Thus, the PlayStation®Vita owner holds an important position with regards to "near" game service availability, and the first-person user who owns PlayStation®Vita on which the game program and "near" application run is called the "owner" in this document.

Conditions for Data Upload

The item data registered using the "near" utility/"near" Dialog utility is updated to the server if the "near" application/"near" Dialog utility verifies that the following conditions met.

- The game title is among the "Most recently played titles" for the owner.
- The game title is not set in "Privacy Contents" on the "near" application by the owner.
  In other words, the "near" application selects and circulates on the "near" game service item data of game titles that the owner plays frequently and has no problem letting others know about.
- Gift data is unique
  Gift data uniqueness is determined through AND evaluation of (`SceNpOnlineId` of the owner distributing the gift data), (`SceNpCommunicationId`) and (`SceNearGiftId`).
  The "near" application/"near" Dialog utility will not upload gift data that has already been uploaded to the "near" server.

Conditions for Discovering Items in the Server

When the "near" application/"near" Dialog utility checks the conditions for receiving items from the "near" server during the "Update" operation and the owner satisfies the conditions for the title in question, the applicable item information will be discovered regardless of whether the game title is among the "Most recently played titles" by the owner.

The conditions to discover/receive an item are as follows.

- The owner satisfies the receive conditions described in the Condition part of the item.
  For the receive conditions, refer to the ""near" Game Service Data Details" chapter.
- The game title distributing the item is not set to "Privacy Contents" on the "near" application by the owner.
- The item is in its validity period after discovery.
- The owner meets one of the following two conditions in the "near" application's **Game Good Settings -> Discover only Game Goods for games you have played.**
  - This checkbox is not unmarked.
  - This checkbox is marked and the game has used the "near" utility/"near" Dialog utility on PlayStation®Vita of the owner.

Conditions for Gift Data to Be Held on the "near" Server

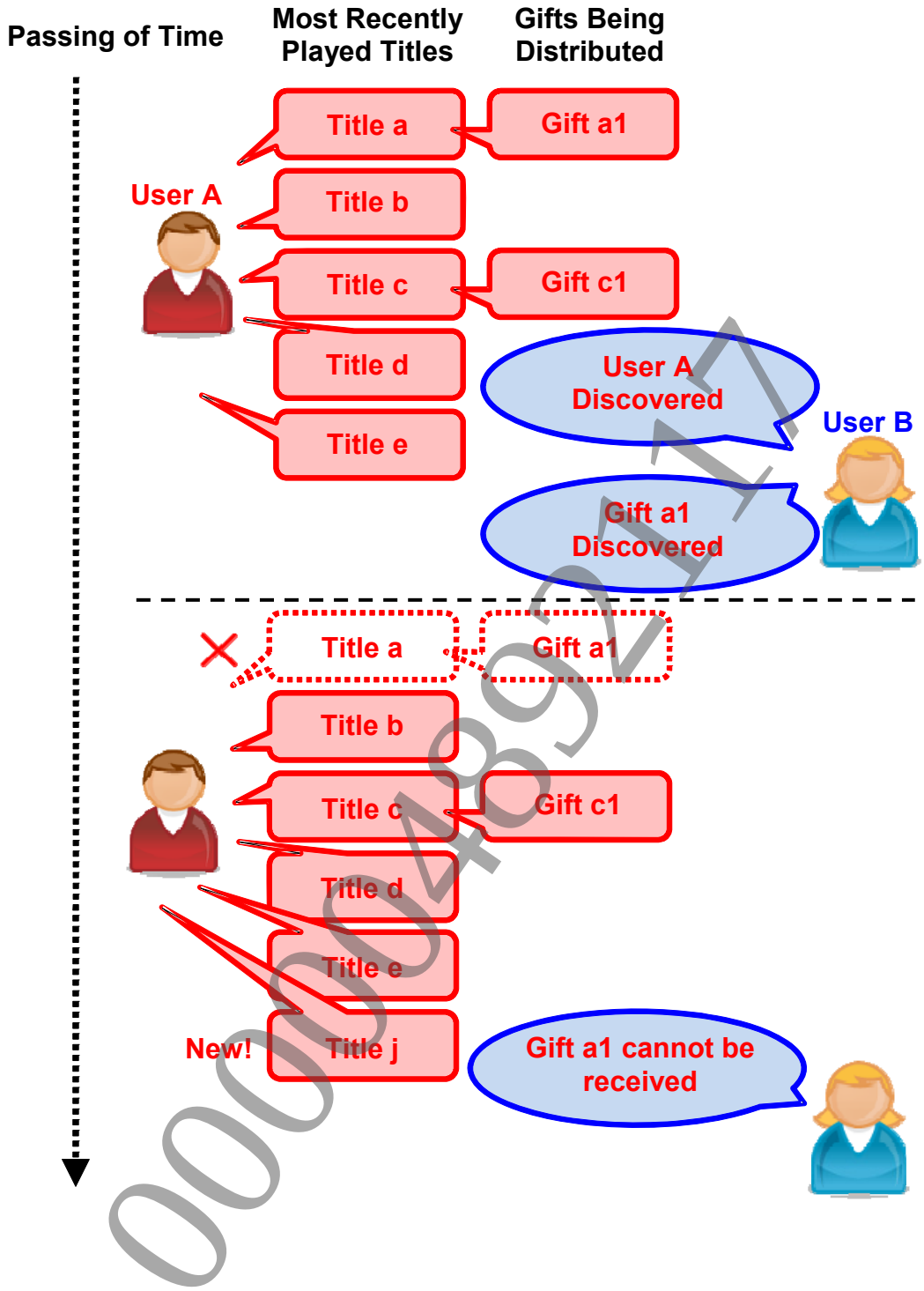
The "near" server will delete the Body part of an uploaded gift data when it meets one of the following conditions:

- The number of times gift data has been received reached the number of the receive conditions specified by the game program.
- The time/date to end distribution of the gift from the "near" server is reached, or the maximum period for holding gift data on the server (90 days in this version) is reached.

Changes in the Possibility of Gift Reception Following Changes in the "Most Recently Played Titles" of the User on the Receiving Side

As stated earlier, distributed gifts are unique and defined by each distributing user. Therefore, if the title of a "discovered" gift is no longer a recently played title for the distributing user, in some cases it may become impossible to receive the discovered gift, as shown in Figure 4.

Figure 4 A case in which a discovered gift cannot be received due to distributing user behavior



Usage Examples

This section describes assumed usage examples for using the "near" game service in games.

Distribution of Items or Raw Materials

Distribute highly value-added items and raw materials that cannot be obtained without using "near"'s gift feature. You can use the distribution of appealing items as a means of advertising your game to users who do not have it.

The rarity value of items and materials can be heightened by setting distributable distance, quantity limits and the probability of discovery. You can also set the "freshness" of items and materials by deciding their expiration dates.

Exchange of Items

Using the "near" game service allows one to exchange items in one's possession inside the game with those owned by other users within the same game.

Collection of Numerical Values

"Things that can be received only from other persons" and "things that the more you have, the happier you are," - such as, power that can be used by the character - are distributed as gifts.

Game users mutually enhance their game play by gaining power from other users, on the condition that one allows one's own power to be used by other users.

Unlocking of Scenario

The user transmits and receives game progress.

The sending side distributes his/her stage progress status in the game.

For stages that the receiving side has not yet unlocked, the receiving side unlocks the stages beaten by the user who sent the gift so that they can be played.

As a result, one can find out whether one's own game progress is faster or slower than those around, thus raising one's competitiveness.

Distribution of Challenge Letters and Invitation Letters

The user invites other users who are online or connected on an ad hoc basis to play with him/her.

It is assumed that to play with the recruited users, the sending side and the receiving side must both be online, or else be connected on an ad hoc basis.

If distributing challenge letters to opponents in a race game, the ghost data is stored in the gift data and distributed.

In online RPG, events to be realized by organizing a party, or one's own fighting capability is stored in the gift data and distributed.

Distribution of the Alter Ego of a Pet or One's Own Character

Instead of one's own character, one sends an alter ego that performs work in the game of the other party. When one's alter ego comes back from work, the payment earned becomes one's payment.

3 "near" Application Overview

Purpose and Features

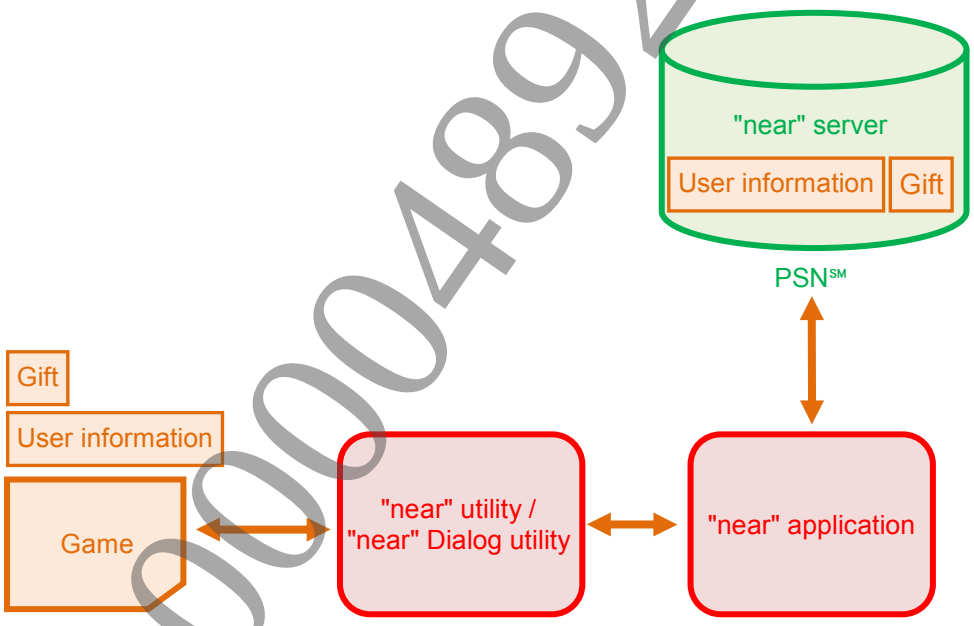
The "near" application is a multifunctional application that uses the location information service library and the PSN℠ service.

The role of the "near" application is, after receiving operation from the user, sending required information from the "near" memory area managed by the system software to the "near" server, and saving information sent from the "near" server to the "near" memory area (Figure 5).

By using the "near" application, information on recently played game titles, item data provided from game titles, and users' online IDs can be transferred among nearby users discovered using the location information service or among friends. This enables a owner to distribute, receive, and browse recently-played game titles, information related to these game titles, and game data provided from these game titles.

For game titles that use the "near" game service via the "near" utility/"near" Dialog utility, delegation features are provided to send/receive various types of data provided by game titles to/from "near" servers.

Figure 5 Role of the "near" Utility in the "near" Game System



Overview of "near" Application Features

Features related to gifts distributed to other users

- Uploading gifts set for distribution to the "near" server
- Obtaining current state of gifts set for distribution on the "near" server

Features related to gifts distributed from another user

- Checking conditions for discovering gifts distributed from nearby users or friends
  Based on the discovering conditions for gifts, gifts to be discovered will be selected upon an "Update"

- Discovering gifts distributed by nearby users or friends
  Storing the Info part of gift data that satisfies conditions upon an "Update"
- Receiving discovered gifts
  Storing the Body part of gift data upon an "Update" for gifts of a game to which **Game Good automatic download settings** is enabled. The Body part of gift data for other games will be stored by operation of the user when they are selected from the "Game Goods Details" screen.
  For the "Discovered" and "Received" states of an item, refer to the ""near" Game Service Data Details" chapter.
- Deleting expired gifts and old gifts

Features related to information of nearby users discovered upon an "Update"

- Saving up to 100 nearby users discovered upon an "Update"
- For each of the above 100 users, saving the number of times the user has been discovered in the past and the last discovery time

Features related to information on usage of the "near" application

- Saving the total number of discovered gifts
- Saving the total number of discovered game titles
- Saving the total number of discovered nearby users
- Saving the distance travelled by the owner

These features can be used when the following conditions are met.

- The age registered to the Sony Entertainment Network account of the owner and the discovered user, respectively, are both 18 years or older.
- The "near" application settings of both the owner and of the discovered user must be set to **Use Location Information**.
- The "near" application settings of both the owner and of the discovered user must be set to **Share Online ID**.

Each Screen's Features

The features of each screen of the "near" application are described below.

Top Menu

The top menu of the "near" application has an **"near" Update** button for starting communication with the "near" server, the gateway to the screen for referencing location information sent to the server by previous updates, an **Discoveries** button for displaying **Discoveries** screen, a **Rankings** button for displaying the detected game titles in order of their popularity, and an **Options** button for displaying the "near" settings and help screen.

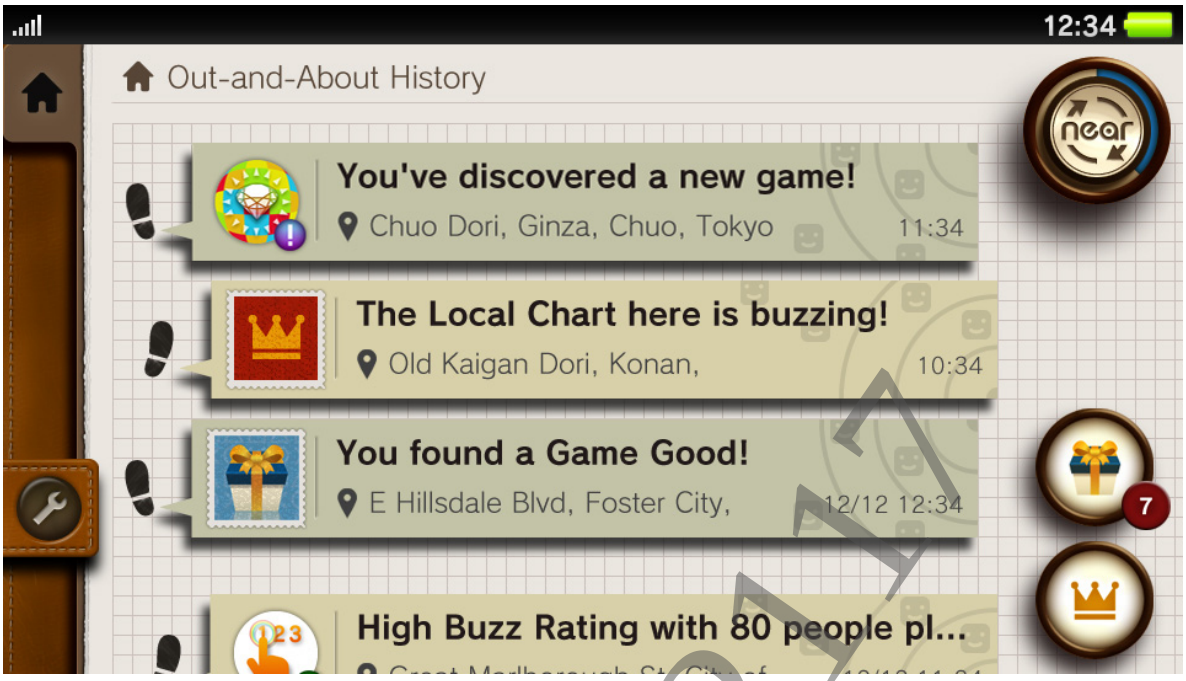
The gateway to the screen for referencing location information sent to the server is not displayed in the "near" application on Development Kits (DevKits) and Testing Kits (TestKits).

Since DevKit and TestKit do not communicate with the "near" server, following "Update" operations data is sent to and received from the development host computer or memory card.

"near" Update Button

Tapping of the **"near" Update** button is referenced as "Update" operation in this document. When the **"near" Update** button is tapped, the location of the owner is calculated. This information is sent along with titles the owner is currently playing, areas passed by the owner, and gift data registered to be distributed by game programs. Upon completion of this communication, the gift data from users near areas passed by the owner and from friends can be detected.

Figure 6　Top Menu



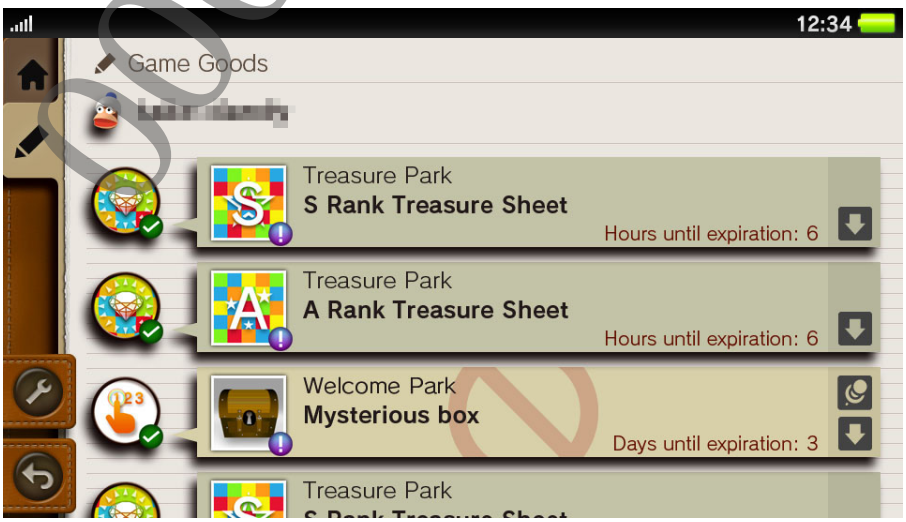
"Discoveries" Screen

The "Discoveries" screen can be used to display the list of the owner's items that are placed in the "Discovered" or "Received" state. Of the gift data, the name, thumbnail image, and the expiry date are displayed onscreen. If one of these items is selected, the screen changes to the "Game Goods Details" screen.

When "Update" is executed by selecting the **"near" Update** button on the top menu, the "near" application discovers items that can be received by the owner via the "near" servers. In the "Discovered" state, the Body part of the item data that can be used in the game is not received. The Body part of the item data can be received by executing "Receive" from the "Game Goods Details" screen.

Up to 100 items can be stored. Up to 50 items can be "discovered" per "Update" operation. When more than 100 items are received, the items are deleted starting from the oldest one. However, items set to the "Saved (locked) state" on the "Game Goods Details" screen are left without being deleted and the number of items that can be discovered through the "Update" operation decreases correspondingly.

Figure 7　"Discoveries" Screen



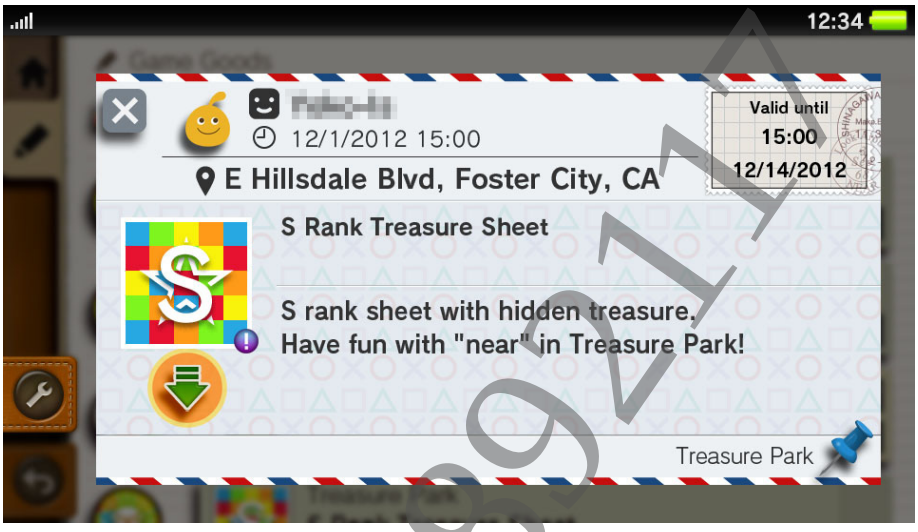
"Game Goods Details" Screen

The "Game Goods Details" screen displays data registered with the "near" utility/"near" Dialog utility from the game title, such as, the item name character string and item details character string. The "Discovered/Received" state, "Saved (locked)/Not saved (unlocked)" state, and "Enabled/Disabled" states of these items are also displayed.

Various operations can be performed on the "Game Goods Details" screen according to the states of items.

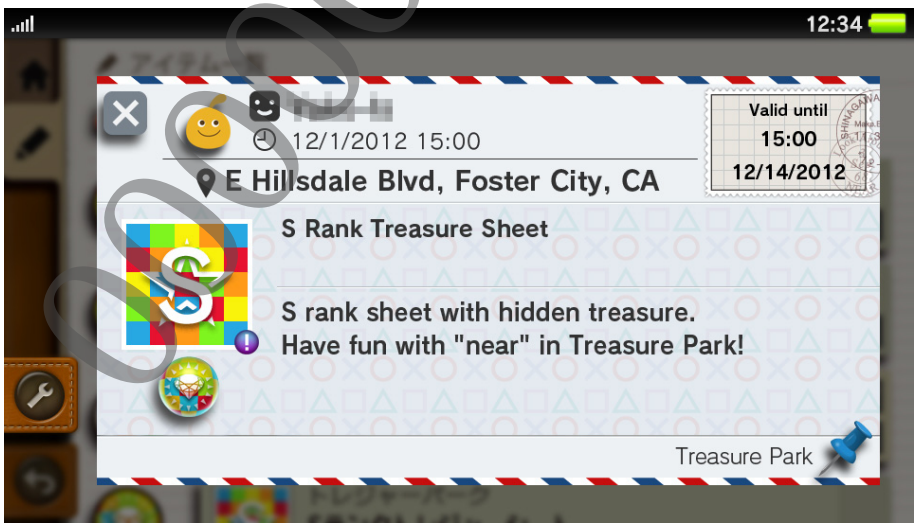
In "Discovered" state,  (**Download** button) will be displayed; tap on it to download (receive) the Body part of the item.

Figure 8 "Game Goods Details" Screen (Discovered State)



In the "Received" state, the application icon is displayed and the user can start the game from this screen. If the target game is not installed on the user's PlayStation®Vita, the PlayStation®Store icon will be displayed, allowing you to prompt the user to purchase the game.

Figure 9 "Game Goods Details" Screen (Received State)



Settings for Discovering and Receiving Item by Users

When **Settings -> Game Good Settings** is selected in the "near" application, the following settings will be displayed (for details on a "Discovered" or "Received" item, refer to Chapter 4).

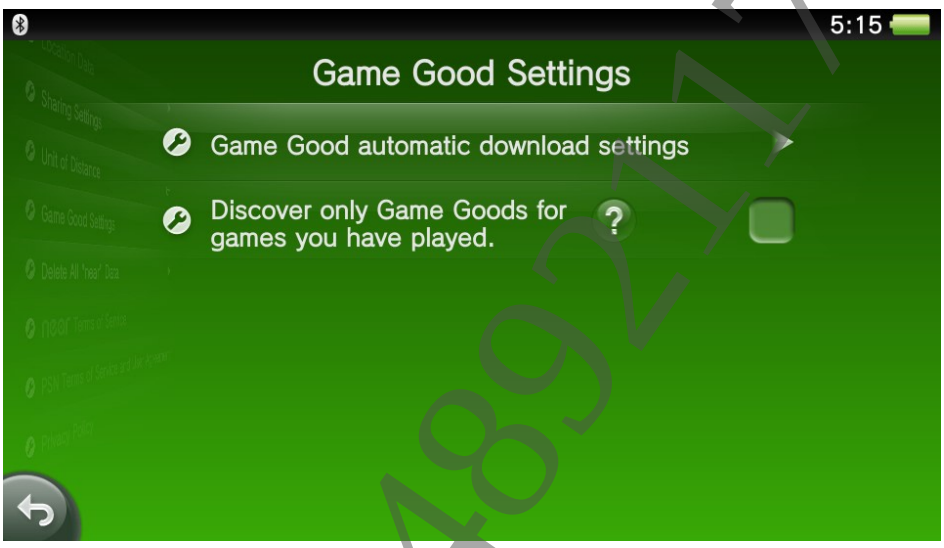
Game Good automatic download settings

Items for titles with this setting marked will always be received when discovered..

Discover only Game Goods for games you have played.

When this setting is marked, items will only be discovered for games that have used the "near" utility/"near" Dialog utility in the PlayStation®Vita (for games that have initialized the utility).

Figure 10 Game Good Settings Screen



"near" Data Initialization

It is possible to initialize just the "near" data without initializing the system software. In the "near" application, select **Settings -> Delete All "near" Data** to delete all "near" application data and all the "near" gift data registered from games.

4 "near" Game Service Data Details

Structure of Gift Data

Gift data consists of the following three parts.

Condition Part

This area stores conditions for discovering/receiving gift data. Details are provided in the next section. This data is downloaded from the "near" server upon an "Update" operation. Based on the contained information, the "near" application/"near" Dialog utility downloads the Info part of the gift that matches the conditions described in the ""near" Game Service Overview" chapter.

Info Part

This is the information that informs the user about the gift data. It consists of a character string and image data. The information stored here is displayed on the "Discoveries" screen and "Game Goods Details" screen of the "near" application.

The following information is stored in the Info part.

- Gift name character string
  UTF-8, within 45 characters and 135 bytes. Characters in excess of these conditions will not be displayed
- Gift contents details character string
  UTF-8, within 90 characters and 270 bytes. Characters in excess of these conditions will not be displayed
- Image data representing gift
  256 color CLUT, PNG, 128 x 128 pixels, maximum size 8 KiB

Body Part

This is the data to be used in a game program.

Its maximum size is 100 KiB. The starting 256 bytes are the parameters notified as an event when a game program is started up from the "near" application. For details, refer to the "near Utility Overview" or "near Dialog Utility Overview" documents.

Conditions for Receiving Gift Data

The following variables are provided in the Condition part of the gift data as conditions for receiving game data. The "near" application/"near" Dialog utility evaluates each variable and determines possibility of discovering/receiving game data. Refer to the "near Utility Overview", "near Dialog Utility Overview", "near Utility Reference", and "near Dialog Utility Reference" documents on how to set each variable.

SceNearGiftId

The "near" application/"near" Dialog utility checks that the gift data is unique by using `SceNearGiftId`.

Gift data uniqueness is determined through AND evaluation of (`SceNpOnlineId` of the distributing user), (`SceNpCommunicationId`) and (`SceNearGiftId`).

Moreover, the higher-order bits of `SceNearGiftId` are used to evaluate whether the following special conditions are met:

- Users who do not have the relevant title can still discover gifts: enabled/disabled
- Identical gift data can be discovered, provided that it is distributed from a different user: enabled/disabled

- The gift contains/does not contain data generated by the user.
  When a gift contains data generated by the user, sending it/receiving it will only be possible when both the sending and the receiving user's Sony Entertainment Network account are not subjected to chat restrictions.

SceNpCommunicationId

This ID serves to distinguish sending/receiving game titles when gift data is exchanged between game titles.

radius

This variable allows the owner to specify the range (distance in meters) within which nearby users must be in order to discover gifts distributed by the owner.

If this variable is not specified, the distance will be set to the maximum radius allowed for searching nearby users in the "near" game service. While this distance varies slightly depending on the actual location of the owner and nearby users, the maximum radius in this version is about 15 km to 25 km.

duration

This is the validity period (in hours) for the gift after it is discovered until it expires and can no longer be received.

If this is not specified, the default validity period defined by the "near" application/"near" Dialog utility will be set. The default validity period in this version is 14 days.

toTime

This variable specifies the time/date to end distribution of the gift from the "near" server. If this is not specified, gift data will be saved on the server for the maximum period for holding gift data (90 days in this version).

probability

This variable specifies the probability (%) by which the gift can be discovered.

If this probability is not specified and the other receive conditions are satisfied, the probability for discovering gift data will be 100%.

receiverAttrs

This variable limits the relationship between the distributing user and the receiving user.

The following types of relationship between users can be specified:

- Friends
- Nearby users

units

This variable specifies the number of times the gift can be distributed. It can also be set so that there is no unit limit.

"Enabled/Disabled" Item States

"Enabled" State

This state indicates that the conditions for receiving the item have been met by the owner. The owner can discover items in this state by performing an "Update" operation.

"Disabled" State

This state indicates the conditions for receiving the item are not met by the owner. The owner will be unable to discover this type of item upon an "Update" operation.

When a "Discovered" item switches back to the "Disabled" state from the "Enable" state, it cannot be received. When a "Received" item switches back to the "Disabled" state from the "Enable" state, the operation to "Start Game and Use Item" will be disabled for that item.

"Discovered", "Received", and "Ignored" Item States

"Discovered" State

The "Discovered" state means the Condition part of the item data has been checked, the owner has been determined to meet the required conditions, and the Info part of the item data has been downloaded, but the Body part has not yet been downloaded.

Items that have just been discovered are in the "Enabled" state. An item that is both "Enabled" and "Discovered" can be "Received" from the "near" application/"near" Dialog utility by the owner.

"Discovered" items can switch back to the "Disabled" state as time elapses. Items that have become "Disabled" can no longer be "Received".

Furthermore, items in the "Discovered" state can be referenced from game programs through the "near" utility/"near" Dialog utility. However, the Body part cannot be obtained because it has not been saved yet.

The operation to "Start Game and Use Item" cannot be performed in the "near" application for items in the "Discovered" state.

"Received" State

"Received state" means the Body part of the item data that was "Discovered" has been downloaded by the owner by performing receive (download) operation on the "near" application/"near" Dialog utility.

Items that have just been received are in the "Enabled" state. An item that is both "Enabled" and "Received" can have the operation to "Start Game and Use Item" operation in the "near" application.

"Received" items can switch back to the "Disabled" state as time elapses. It is not possible to perform the operation to "Start Game and Use Item" for items that have become "Disabled".

Also, items in the "Received" state can be referenced from the game program through the "near" utility/"near" Dialog utility.

"Ignored" State

Gift data of a gift in the "Discovered" or "Received" state will be completely deleted without remaining on the "near" memory area when it is deleted from the game program by the "near" utility/"near" Dialog utility. Gift data will also be completely deleted when its validity period expires and also when the maximum number of saved gifts exceeds 100. A deleted gift may be discovered again in subsequent "Update" processing. Although it may not be desirable for the same gift to be received over and over again, it is not possible to save the "Received" state of all gifts in the "near" application.

In addition to the 100 gifts visible to an owner, an additional 100 invisible gifts (gifts in the "Ignored" state) can be saved. Like gifts in the "Received" state, gifts in the "Ignored" state will be subjected to the determination of conditions performed when a new gift is discovered.

By specifying "Discovered" or "Received" state gifts with the "near" utility/"near" Dialog utility, "Ignored" state gifts (up to 100) that users cannot see can be added.

Once a gift enters the "Ignored" state, it will not be displayed in the "near" application. Moreover, a gift in the "Ignored" state cannot be referenced by game programs.

Item (Gift) States and State Transitions

Possible Operation for Each Item Data State

The possibility of each operation (discover/receive/use in game) within the states described above is indicated in Table 1.

Table 1 Possible Operations for Each Item State

			Operation in the "near" Application/ "near" Dialog Utility (Discover/Receive)			Operation in Game
			Discover (Update)	Receive	Start Game and Use Item	Reference Item
State	Enabled	Undiscovered	Yes ->Discovered	-	-	-
		Discovered	-	Yes ->Received	-	Yes (info part only)
		Received	-	-	Yes	Yes
		Ignored	No	No	No	No
	Disabled	Undiscovered	No	-	-	-
		Discovered	-	No	No	Yes (info part only)
		Received	-	-	No	Yes (info part only)
		Ignored	No	No	No	No

Possible Operation for Each Item Data State before/after Expiration

The effect that the expiration of a gift's validity period (specified by the duration variable) has on the "Enabled" or "Disabled" state of a "Discovered"/"Received" gift is indicated in Table 2.

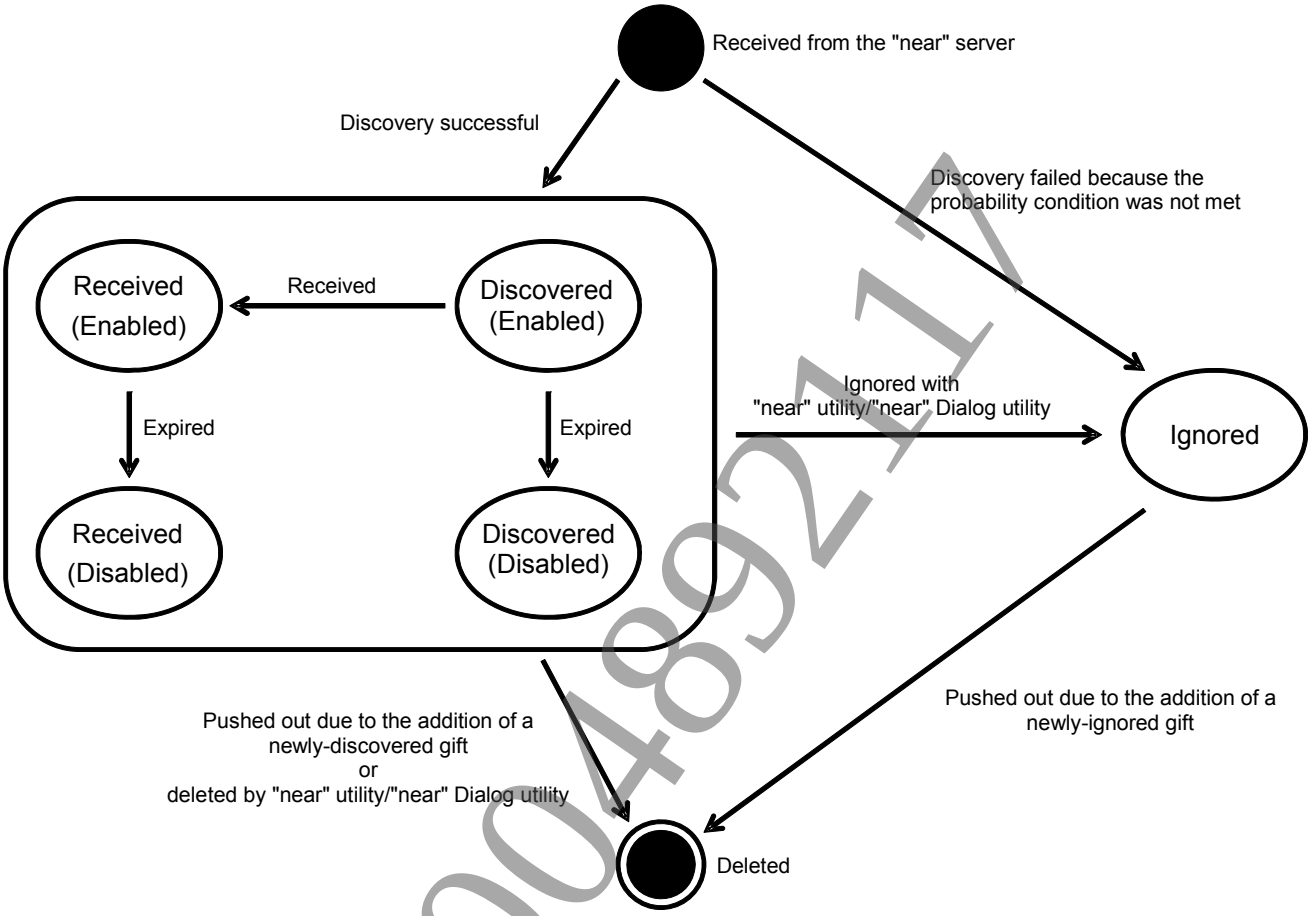
Table 2 Possible Operation in the Discovered/Received/Ignored State before/after Expiration

			Operation in the "near" Application/ "near" Dialog Utility (Receive)		Operation in Game
			Receive	Start Game and Use Item	Reference Item
State	Discovered	Before expiration	Yes	No	Yes (info part only)
		After expiration	No	No	Yes (info part only)
	Received	Before expiration	-	Yes	Yes
		After expiration	-	No	Yes (info part only)
	Ignored	Before expiration	No	No	No
		After expiration	No	No	No

Gift State Transition Diagram ("Discovered"/"Received"/"Ignored")

Figure 11 shows how a gift's state ("Discovered"/"Received"/"Ignored") transitions according to each event (discovered upon an "Update" operation, receive, expiration of the gift's validity period, and operation by a "near" utility/"near" Dialog utility API operation)

Figure 11 Gift State Transitions



Multilingual Support for Gift Information Character Strings

When distributing a gift, the character strings of gift information (the Info part's gift name character string and the character string containing details on the gift's contents) can either be made to include a single language or multiple languages.

Including a Single Language in the Gift Information Character Strings

When gift information character strings containing only a single language are sent, the character strings registered with the sending user's game program will be transmitted as they are to the "near" application/"near" utility/"near" Dialog utility of the user on the receiving side. In other words, there is no guarantee that the character strings will be displayed in the language employed by the receiving user as his/her system language.

Including Multiple Languages in the Gift Information Character Strings

Character strings in languages of the same number as those supported as system languages can be registered from the game program as the character strings of gift information.

The "near" system selects character strings by language by following the procedure outlined below and in accordance with rules for screening the 6 languages based on the sending user's and receiving user's system language (), and character strings in one of the languages are transmitted to the "near" application/"near" utility/"near" Dialog utility on the receiving side.

Selection of 6 Languages when Registering Gifts to be Distributed

(a) Using the sending user's system language as reference, character strings in up to 6 languages based on Table 3 will be registered as information character strings of the gift to be distributed. If the character strings in the languages listed in Table 3 are not given by the game program, the relevant selected languages will be left empty.

(b) If none of selected languages (1) to (6) corresponding to the sending user's system language is given by the game program, all selected languages will be left empty. In such cases, the first language out of the array of character strings given by the game program will be deemed to be the system language, and the processing outlined in (a) will be performed.

Transmission to and Reception from the "near" Server

The "near" application/"near" Dialog utility on the sending side will send the character strings in up to 6 languages registered for distribution as they are to the "near" server, and the "near" application/"near" Dialog utility on the receiving side will receive the character strings in up to 6 languages as they are from the "near" server.

Selection of 1 Language on the Side Receiving the Gift

If the gift information character strings received include a character string in any of selected languages (1) to (6) of Table 3 based on the receiving user's system language, it will be adopted. At such times, the receiving side will check selected languages in order from (1) to (6); if the gift received contains a character string in the receiving side's system language, this will invariably be adopted.

If, as a result of the above, no character string in a language to be adopted is found, the presence of character strings will be checked in the order of selected languages (1) to (6) in the Info part of the gift received, and a character string in the first language found will be adopted.

Table 3 Rules for the Selection of 6 Languages for Gift Information Character Strings

System Language	Selected Language (1)	Selected Language (2)	Selected Language (3)	Selected Language (4)	Selected Language (5)	Selected Language (6)
English (United States)	English (1.US, 2.UK)	Spanish	Portuguese (1.BR, 2.PT)	French	German	Italian
Spanish	Spanish	English (1.US, 2.UK)	Portuguese (1.PT, 2.BR)	French	German	Italian
Brazilian Portuguese (Brazil)	Portuguese (1.BR, 2.PT)	English (1.US, 2.UK)	Spanish	French	German	Italian
French	French	English (1.UK, 2.US)	German	Spanish	Italian	Portuguese (1.PT, 2.BR)
English (United Kingdom)	English (1.UK, 2.US)	French	German	Spanish	Italian	Portuguese (1.PT, 2.BR)
German	German	English (1.UK, 2.US)	French	Spanish	Italian	Portuguese (1.PT, 2.BR)
Italian	Italian	English (1.UK, 2.US)	French	German	Spanish	Portuguese (1.PT, 2.BR)
Portuguese (Portugal)	Portuguese (1.PT, 2.BR)	English (1.UK, 2.US)	Spanish	French	German	Italian
Dutch	Dutch	English (1.UK, 2.US)	French	German	Spanish	Portuguese (1.PT, 2.BR)
Danish	Danish	English (1.UK, 2.US)	French	German	Spanish	Portuguese (1.PT, 2.BR)
Finnish	Finnish	English (1.UK, 2.US)	French	German	Spanish	Portuguese (1.PT, 2.BR)
Norwegian	Norwegian	English (1.UK, 2.US)	French	German	Spanish	Portuguese (1.PT, 2.BR)
Swedish	Swedish	English (1.UK, 2.US)	French	German	Spanish	Portuguese (1.PT, 2.BR)
Russian	Russian	English (1.UK, 2.US)	French	German	Spanish	Portuguese (1.PT, 2.BR)
Polish	Polish	English (1.UK, 2.US)	French	German	Spanish	Portuguese (1.PT, 2.BR)
Turkish	Turkish	English (1.UK, 2.US)	French	German	Spanish	Portuguese (1.PT, 2.BR)
Japanese	Japanese	English (1.US, 2.UK)	Korean	Chinese (simplified)	Chinese (traditional)	Portuguese (1.BR, 2.PT)
Korean	Korean	English (1.US, 2.UK)	Japanese	Chinese (simplified)	Chinese (traditional)	Portuguese (1.PT, 2.BR)
Chinese (simplified)	Chinese (simplified)	Chinese (traditional)	English (1.US, 2.UK)	Japanese	Korean	Portuguese (1.PT, 2.BR)
Chinese (traditional)	Chinese (traditional)	Chinese (simplified)	English (1.US, 2.UK)	Japanese	Korean	Portuguese (1.PT, 2.BR)

*Notations such as English (1.US, 2.UK) and Portuguese (1.PT, 2.BR) in the table indicate which region's language is prioritized when the same language is present in different regions. In other words:

- English (1.US, 2.UK): English (United States) is prioritized, and if it is not present English (United Kingdom) is adopted.
- English (1.UK, 2.US): English (United Kingdom) is prioritized, and if it is not present English (United States) is adopted.
- Portuguese (1.PT, 2.BR): Portuguese (Portugal) is prioritized, and if it is not present Brazilian Portuguese (Brazil) is adopted.
- Portuguese (1.BR, 2.PT): Brazilian Portuguese (Brazil) is prioritized, and if it is not present Portuguese (Portugal) is adopted.

5 Notes

Memory Area and Recording Conditions of Gift Data Registered for Distribution

When a game program sets gift data for distribution using the "near" utility/"near" Dialog utility, that title is always included in the 5 "Most recently played titles". Therefore, that game title is guaranteed to be recorded in the system software. On the other hand, during the time before the game program is started up again, the game title may temporarily not be included in the 5 "Most recently played titles". In this case, the "near" application may delete registered gift data from non-volatile memory of PlayStation®Vita "near" memory area.

In this version, registered data for a maximum of 50 titles are stored in the "near" memory area. However, if more than 50 titles each register their gift data for distribution, the system software may delete registered gift data.

By using "near" utility/"near" Dialog utility, you can check whether registered gift data is still in the registered state when the game is next started up, or whether it has been deleted by the system software.

Memory Area and Recording Conditions of Received Gift Data

A maximum of 100 received gift data for all titles can be stored on the "near" memory area. This also means a maximum of 100 gifts can be obtained in a game program.

Usage Conditions of "near" Game Service

One of the conditions for using the "near" game service is that the age of the owner registered to the Sony Entertainment Network account as calculated from his/her birth date is 18 years or older. This restriction applies only to the use of "near", and does not mean that the title's parental control level has been raised to 18 or older just on account of having used the "near" game service.

Handling User Generated Content

- R3117 in the TRC (Technical Requirements Checklist) stipulates that game programs must be made so that users cannot set contents input by themselves as gift thumbnails, names and descriptions. If including user-generated contents in a gift, make sure to inquire with Private support via the PlayStation®Vita Developer Network website (https://psvita.scedev.net/) and obtain permission in advance.
- TRC R3053 stipulates that, when sending/receiving a gift qualifying as "User Generated Content" approved by Private support, game programs must check whether the user's Sony Entertainment Network account is subjected to chat restrictions. If chat restrictions are applied, the game program should restrict gift transmission/reception. Refer to the "near Utility Overview" and "near Dialog Utility Overview" documents on how to restrict gift transmission/reception.

Accuracy of Distribution Counts

The distribution count is not strictly managed. Therefore, avoid using the distribution count in a manner that affects core operations of the game.

6 Notes on PlayStation®TV

Operation on PlayStation®TV

With PlayStation®TV (including a DevKit with **PS TV Emulation** set to **On**), the "near" application will not start. On PlayStation®TV, the "near" application icon will not be displayed in the home screen.

Therefore, users will not be able to agree to the "near" terms of service on PlayStation®TV, and the status will always be the same as if the "near" terms of service have not been agreed to.

The "near" utility/"near" Dialog utility will operate on PlayStation®TV with the same specifications as the "near" utility/"near" Dialog utility for PlayStation®Vita, including error codes. In other words, the "near" utility/"near" Dialog utility on PlayStation®TV will operate with a status the same as when a user has not agreed to the "near" terms of service on PlayStation®Vita.

When a game calls an API that starts the "near" application, error dialog will be displayed in the game screen, and the "near" application will not be able to start. As a result, the user will only be able to return to the game without doing anything else.

If the "near" application cannot be started or if a user cannot agree to the "near" terms of service, the following restrictions will occur:

- It will not be possible to receive gifts from other users, including friends
- Nearby users will not be detected
- Distance traveled, the number of nearby users, the number of discovered games, the number of discovered items, etc. will always be 0

Notes on Using the "near" Utility/"near" Dialog Utility with PlayStation®TV

Since the "near" application cannot start on PlayStation®TV, develop the game under the assumption that when the game attempts to start the "near" application for the following purposes, users will not be able to fulfill these purposes. As with games for PlayStation®Vita, do not program the game so that it becomes unplayable if the following purposes are not fulfilled.

- Making the user agree to the "near" terms of service
- Making the user set the **Do not ask my permission again** setting in the "near" application
- Making the user set the **Share Online ID** setting in the "near" application

Switching PS TV Emulation on and off on DevKits

When **PS TV Emulation** is turned **On** on a DevKit, if the "near" game service was used when **PS TV Emulation** was turned **Off**, this fact will be concealed from the game.

If gifts are received or nearby users are discovered when **PS TV Emulation** is turned **Off** on a DevKit and then **PS TV Emulation** is turned **On**, it will no longer be possible for the game program to be aware of the fact that gifts were received or nearby users were discovered. When **PS TV Emulation** is turned **Off** again, operation will return to reflecting the fact that gifts were received or nearby users were discovered using the "near" game service.

7 FAQ

(1) What are the advantages of incorporating gifts in a game?

One advantage lies in the possibility of making your game title known to new users, and encouraging them to try it by distributing data that can be used in it.

Also, the incorporation of gifts can also further increase the popularity of a game title through the synergistic effect that can be expected from strengthening the bond among users who already know or own the game title.

(2) Can the "quantity" of gifts for distribution be specified?

Yes. However, since transactions are not managed, complete quantity management is not possible. Refer to the "near Utility Overview" document and the "near Utility Reference" document or "near Dialog Utility Overview" document and the "near Dialog Utility Reference" document on how to perform quantity settings.

(3) Are "exchanges" of gifts and "thank-you gifts" to people who have given gifts to the user possible?

The "near" game service does not support "exchanges". It is however possible to use game boot messages (custom data attached) of NP Message Dialog or InGame data messages of the NP Basic library etc. to pass data to people who have given gifts to the user as InGame data, thus simulating "exchanges" and "thank-you gifts".

Concerning the game boot messages (custom data attached) of NP Message Dialog, refer to the "NP Message Overview" document and the "NP Message Reference" document. Concerning the InGame data messages of the NP Basic library, refer to the "NP Basic Library Overview" document and the "NP Basic Library Reference" document.

(4) Is it possible to discover/receive gifts from titles that are restricted by parental control?

It is possible to discover gifts from titles that are restricted by parental control. To this purpose, descriptions and thumbnail images showing the contents of the gifts must be suitable for all ages. Gifts can be received as long as they are not blocked by the game's own age limit when actual use is attempted.

(5) Will imbalances in gift discovery opportunities and other problems occurring at crowded or underpopulated locations be solved?

First of all, the "near" game service supports gift exchanges using the server. For this reason, users do not have to be close to each other, and can be found as long as they are within the maximum distance prescribed on the server side. Users do not have to be temporally close, either, and can be discovered over a maximum time of 1 week.

(6) Can the character strings of gift names and detailed gift descriptions be displayed in multiple languages?

Yes. Refer to the "near Utility Overview" and "near Utility Reference" documents or the "near Dialog Utility Overview" and "near Dialog Utility Reference" documents.

(7) Can the "near" application communicate with the "near" server in the background while a game program is running?

Yes. The "near" application can run in parallel with game programs. Furthermore, if **Obtain location automatically at regular intervals** or **Turn on "near" automatic location updates** is enabled in the settings of the "near" application, obtaining location data and sending/receiving to/from the server will be performed without user operation. This operation is also possible while the PlayStation®Vita is in suspended state.

(8) Can the "near" application communicate normally while the game is in ad hoc mode?

Since communication with the "near" server uses the infrastructure mode, the "near" application does not automatically connect to the server in the background while the game program is communicating in ad hoc mode.

(9) Can the same gift be obtained multiple times? Conversely, can the number of times the same gift is received be limited?

By setting the upper bits (0x40000000) reserved in `SceNearGiftId`, it is possible to obtain gifts with the same `SceNearGiftId`, provided that they are distributed by different users. At this time uniqueness is determined when `SceNpCommunicationId`, `SceNpOnlineId`, and `SceNearGiftId` all coincide.

On the other hand, when these bits are unset gifts with the same `SceNearGiftId` will be determined to be identical even if they are distributed by different users, and reception of multiple gifts will be disabled.

(10) How will user experience vary in 3G and Wi-Fi models?

In the PlayStation®Vita, location can be calculated by referencing the database of access points and location information stored in the system software, based on the MAC address of nearby Wi-Fi access points.

In 3G models, in addition to location calculation by Wi-Fi , location calculation via 3G antenna and GPS location calculation will also be possible. User experience will be different in that, while users with 3G models will be able to check and receive available gifts "here and now", Wi-Fi model users will only be able to receive gifts "retrospectively" when they have returned home, or at nearby available access points

(11) Can data be sent or received directly to/from the game program from/to the "near" server?

No. Since server costs are borne by PSN℠, we have decided not to allow unlimited use of all titles. We have opted for a system whereby the right to begin sending/receiving data is held by the "near" application/"near" Dialog utility, and communication with the server is carried out by user operation/settings limited to the PlayStation®Vita owner's 5 "Most recently played titles".

(12) Can gift data be overwritten and returned to the "near" server?

If User B receives a gift distributed by User A, and sends it after overwriting its data, that gift will simply be registered on the server as a gift distributed by User B and not as the overwritten gift from User A.

(13) In cases where gift data is relayed among multiple users, is there a way for users receiving the data to check who else has received it so far?

This feature is not provided in the "near" system, but it should be possible to achieve the same results on the game program side by adding to the gift data the identifiers of the users who have received it.

(14) Can the receiving of gift data with "near" be used as an event to unlock trophies?

This presents no problem as far as the "near" game service is concerned. However, check with TPR in each region concerning the appropriate kind of Trophy.