Sharpschedule - Activity Planning and **Progress Tracking**

Clayton Harbour

Sharpschedule - Activity Planning and Progress Tracking

by Clayton Harbour

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Executive Summary

[http://www.svdpvictoria.com]



Sharpschedule replaces an existing scheduling system at St. Vincent de Paul, Ozanam in Victoria BC. The initial tracking system provided information on community outings and activities and was designed to increase the frequency and quality of these outings. A change in need has now put focus on the in house activity as well as the outings. It was also desirable to create a more integrated solution, where client information, planned activities and actuals could be reconciled in the same place. Sharpschedule provides this unified recording system in the form of client, staff and schedule information capture screens, schedule administration (exception) screens and reports generated online or in pdf format.

Sharpschedule is designed with a phased approach. The first phase of the project will provide detailed scheduling information and reconcilliation, as well as reporting. Database tables will be provided for capture in a number of other areas, mostly centered around client goals and planning, but data entry and reporting for these sub-systems will be implemented in future revisions. The business needs that sharpschedule will satisfy today are:

- 1. Staff Data Management: Tracking of staff contact information, and staff photos.
- 2. Client Data Management: Tracking of client contact information, client photos, medical information, client goals and comments on client progress.
- 3. Consolidation of existing scheduling tools: Replace current word and excel documents with a pdf schedule report that is generated from current "live" data.
- 4. Auditability: Provide an electronic tracking system to account for changes made in the schedule, both before an activity would be completed and after/ during the activity has been completed in the form of an exception report. Exceptions would occur if a client was scheduled to perform an activity and was unable to perform the activity at that point in time (i.e. was sick).
- Increase Accessibility: Web interface allows client information to be easily accessible by all staff members.
- Security: Integrate with current Windows NT domain security, provides lockout of administrative only pages to non-administers.

Future functionality will include:

- Client Data Management: Tracking of client medical information, client goals and automation of client quarterly reports.
- 2. Security: Role based security to allow view privileges to certain data while locking down edit privileges.

Sharpschedule uses open technologies in an effort to reduce the cost of licensing to the Ozanam agency, with the exception of Windows XP Professional all components are freely available (please see Appendix A, *Tools* for details). Future goals will be to deploy the application using mono and Linux to push all components into the free/ open source realm.

Chapter 1. Overview

[http://www.svdpvictoria.com]



Abstract

Intended audience and use of this document.

Introduction

Abstract

This guide will help users of the scheduling program identify the tasks necessary to generate a daily schedule.

This document will provide a step by step overview of how manage the various data domains available in the sharpschedule system. It provides a detailed description of the data fields, required fields and input masks.

The guide will also cover the generation of scheduling reports.

Chapter 2. Client Management

[http://www.svdpvictoria.com]



Abstract

Client management screens are used to add, update and view client data and information. Various information about a client is tracked such as the name, birthdate and healthcare, contact information, comments (with dates) and photos.

Overview

Abstract

Overview of fields available on the client management screens, whether the fields are required and any the format that is expected for the filed.

Client management screens provide access to the following fields:

Table 2.1. Client

| Name | Description | Required | Input Mask |
|--------------------|--|----------|--|
| First Name | First name of the client | true | |
| Last Name | Last name of the client | true | |
| Birthdate | Date of birth for the client if known | NO | valid date (i.e. YYYY/ MM/DD or DD/ MM/YYYY) |
| Health Care Number | Health care number if known | YES | ######## |
| New Photo | Photograph of the client | NO | |
| Effective Date | The date the client joined the program | YES | valid date (i.e. YYYY/ MM/DD or DD/ MM/YYYY) |
| Expiry Date | The date the client left the program | NO | |

Table 2.2. Client Contact

| Name | Description | Required | Input Mask |
|-------------|--|----------|------------------------------|
| Address | The street address of the client | YES | |
| City | City the client lives in | YES | |
| Province | The province the client currently lives in | YES | |
| Postal Code | Canadian postal code | YES | A#A #A# |
| Phone 1 | Primary phone number | YES | (###) ###-#### |
| Phone 2 | Secondary phone number | YES | (###) ###-#### |
| Email | Email address | NO | [username]@[server-na me] |

Add

Abstract

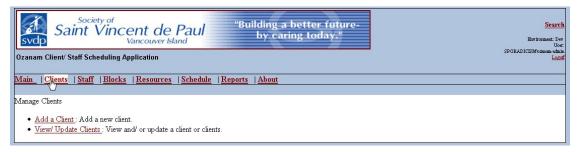
Describes the steps to add a client.

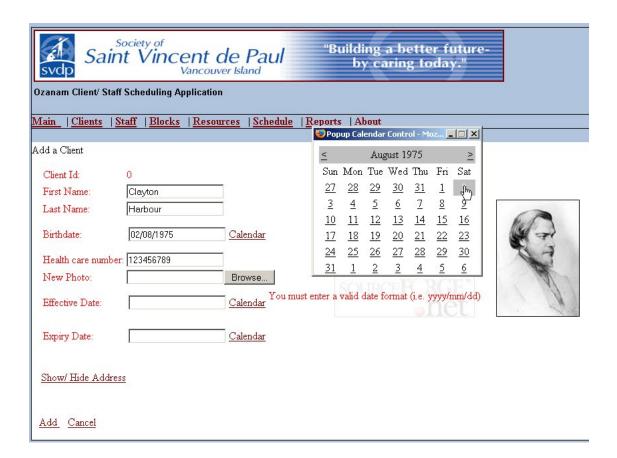
To add a new client to the database the following steps must be performed (Figure 2.1, "Add client"):

- 1. Click on the Client tab.
- 2. Select the add link.
- 3. Enter the client information. Optionally expand the address section and enter the contact information.
- 4. Click on the add button on the bottom of the screen. If there are errors correct them and click add again.

Add a Client: Used to enter new client data.

Figure 2.1. Add client





View

Abstract

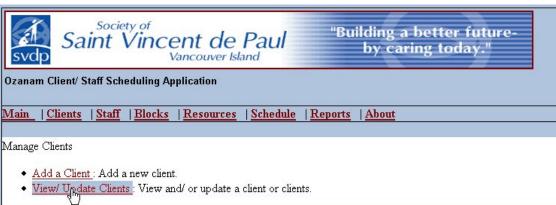
Describes the steps to view a client.

To view a client you must select the client you are interested in from a list of possible targets. Selection of a client is made easier through menu sorting and pagination of client data.

We will first sort the client by name for this example and then locate the client we are interested in by their name (Figure 2.2, "View Client"):

- 1. Click on the Client tab.
- 2. Select the view/update link.
- 3. Click on the Last Name link to sort all clients by last name.
- 4. Click on the edit link to open the client for viewing/editing.
- 5. Make the appropriate changes, optionally expand and edit the contact information and then click the update link to save the changes.

Figure 2.2. View Client







Update

Abstract

Describes the steps to update a client.

To update a client you must select the client you are interested in from a list of possible targets. Selection of a client is made easier through menu sorting and pagination of client data.

We will first sort the client by name for this example and then locate the client we are interested in by their name (Figure 2.3, "Update Client"):

- 1. Click on the Client tab.
- 2. Select the view/update link.
- 3. Click on the Last Name link to sort all clients by last name.
- 4. Click on the edit link to open the client for viewing/ editing.
- 5. Make the appropriate changes, optionally expand and edit the contact information and then click the update link to save the changes.

Figure 2.3. Update Client



"Building a better futureby caring today."

Ozanam Client/ Staff Scheduling Application

Main | Clients | Staff | Blocks | Resources | Schedule | Reports | About

Manage Clients

- Add a Client: Add a new client.
- View/ Undate Clients: View and/ or update a client or clients.



"Building a better future by caring today."

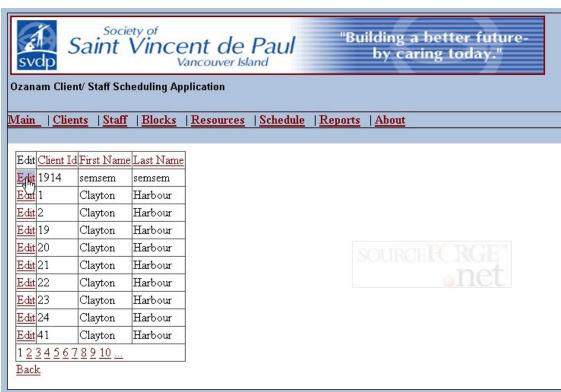
Ozanam Client/ Staff Scheduling Application

Main | Clients | Staff | Blocks | Resources | Schedule | Reports | About

| Edit | Client Id | First Name | Last Name |
|------|-----------|------------|-----------|
| Edit | 1 | Clayton | Harbour |
| Edit | 2 | Clayton | Harbour |
| Edit | 19 | Clayton | Harbour |
| Edit | 20 | Clayton | Harbour |
| Edit | 21 | Clayton | Harbour |
| Edit | 22 | Clayton | Harbour |
| Edit | 23 | Clayton | Harbour |
| Edit | 24 | Clayton | Harbour |
| Edit | 41 | Clayton | Harbour |
| Edit | 42 | Clayton | Harbour |
| 12 | 34567 | 8 9 10 | |

Back







Chapter 3. Staff Management

[http://www.svdpvictoria.com]



Abstract

Overview of components that are tracked for staff members, such as their contact information and photos and how these are updated.

Overview

Abstract

Overview of fields available on the staff management screens, whether the fields are required and any the format that is expected for the filed.

Available staff fields are:

Table 3.1. Staff

| Name | Description | Required | Input Mask |
|--------------------|--|----------|--|
| First Name | First name of the client | YES | |
| Last Name | Last name of the client | YES | |
| Birthdate | Date of birth for the client if known | NO | valid date (i.e. YYYY/ MM/DD or DD/ MM/YYYY) |
| Health Care Number | Health care number if known | YES | ######## |
| New Photo | Photograph of the client | NO | |
| Effective Date | The date the client joined the program | YES | valid date (i.e. YYYY/ MM/DD or DD/ MM/YYYY) |
| Expiry Date | The date the client left the program | NO | |

Table 3.2. Staff Contact

| Name | Description | Required | Input Mask |
|-------------|--|----------|------------------------------|
| Address | The street address of the client | YES | |
| City | City the client lives in | YES | |
| Province | The province the client currently lives in | YES | |
| Postal Code | Canadian postal code | YES | A#A #A# |
| Phone 1 | Primary phone number | YES | (###) ###-#### |
| Phone 2 | Secondary phone number | YES | (###) ###-#### |
| Email | Email address | NO | [username]@[server-na me] |

Add

Abstract

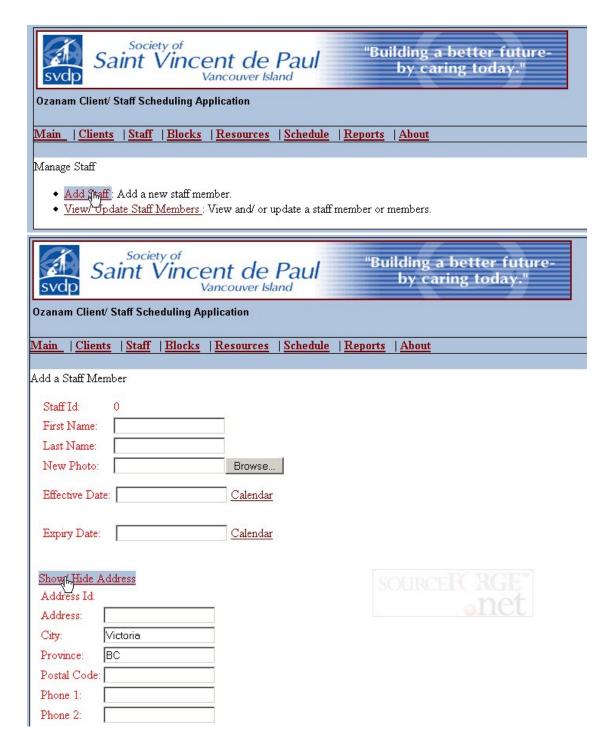
Describes the steps to add a new staff member.

Add a Staff Member: Used to enter new staff data. The general steps to add a staff member are (Figure 3.1, "Add Staff"):

- 1. Click on the Staff tab.
- 2. Select the add link.
- 3. Enter the client information. Optionally expand the address section and enter the contact information.
- 4. Click on the add button on the bottom of the screen. If there are errors correct them and click add again.

Figure 3.1. Add Staff





View

Abstract

Describes the steps to view a staff member.

View Staff Members: In order to view a staff member you must first be able to locate the staff member.

This is currently accomplished by viewing a list of staff members and selecting the staff from that list. The steps to view a staff member are (Figure 3.2, "View Staff"):

- 1. Click on the Staff tab.
- 2. Select the view/ update link.
- 3. Select the staff member from the list, optionally sort or select a different "page" of data.
- 4. Click on the edit button to view the staff member.



Figure 3.2. View Staff

Update

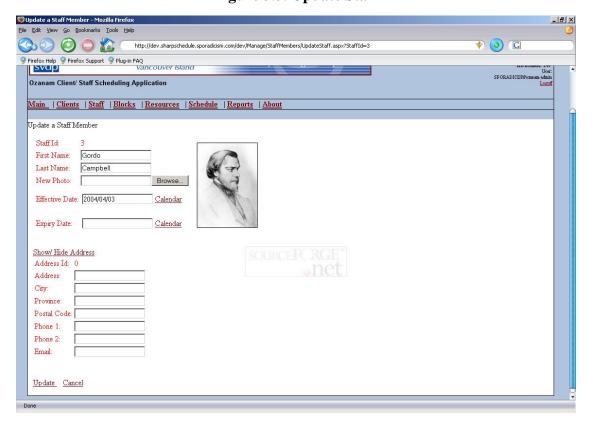
Abstract

Describes the steps to update a staff member.

Update Staff Members: In order to update a staff member you must first be able to locate the staff that you wish to update. This is currently accomplished by viewing a list of staff members and selecting the staff to update from that list. The steps to update a staff member are (Figure 3.3, "Update Staff"):

- 1. Click on the Staff tab.
- 2. Select the view/ update link.
- 3. Select the staff member from the list, optionally sort or select a different "page" of data.
- 4. Click on the edit button to view the staff member.
- 5. Change the appropriate data.
- 6. Click update to commit the changes.

Figure 3.3. Update Staff



Chapter 4. Resource Management

[http://www.svdpvictoria.com]



Abstract

Resources are physical locations that contain activities, such as outing sites, in house rooms, etc. These consist of physical places that are used to satisfy the outing or in house activity, examples include the crafts room at Ozanam, the swimming pool and soup kitchen. These are further categorized into two distinct "super groups", which help to define the need or goal that the activity is satisfying.

Overview

Abstract

Resource entry is currently directed through Resource page, found by clicking on the Resource tab item.

The following fields are available for a resource:

Table 4.1. Resource

| Name | Description | Required | Input Mask |
|--------------------|---|----------|------------|
| Description | Description of the resource | YES | |
| Contact | Name of the contact at the resource location. | YES | |
| Placement Type | Type of place that is being visited. | YES | lookup |
| Placement Category | Category of goal that resource satisfies. | YES | lookup |

Add

Abstract

Describes the steps used to add a resource.

Add a Resource: To add a resource perform the following steps (Figure 4.1, "Add Resource"):

- 1. Click on the Resource tab.
- 2. Select the add Resource link.
- 3. Enter the appropriate data.
- 4. Click on the add link.

Figure 4.1. Add Resource



View

Abstract

Describes the steps to view a resource.

View Resource: In order to view a resource you must first be able to locate it. This is currently accomplished by viewing a list of resources and then selecting the resource from that list (Figure 4.2, "View Resource"):

Click on the Resource tab.

- 2. Select the view/update resource link.
- 3. Select the resource you wish to view from the list.
- 4. Click on the edit link.

Figure 4.2. View Resource



Update

Abstract

Describes the steps to update a resource.

Update Resource: In order to update a resource you must first be able to locate it. This is currently accomplished by viewing a list of resources and then selecting the resource that you wish to update from that list (Figure 4.3, "Update Resource"):

- 1. Click on the Resource tab.
- 2. Select the view/update resource link.
- 3. Select the appropriate resource from the list.

- 4. Click on the edit link.
- 5. Make the appropriate data changes to the resource.
- 6. Click on the update link to commit the changes.

Figure 4.3. Update Resource



Chapter 5. Placement Management

[http://www.svdpvictoria.com]



Abstract

Overview of the concrete purpose of the placement; this is the function the client will be performing. This is usually a Community Outing however it can encompass things such as a job site visit, work or volunteer experience or employment.

Overview

Abstract

Overview of fields available on the placement type screens, whether the fields are required and any the format that is expected for the filed.

The following fields are available:

Table 5.1. Placement Type

| Name | Description | Required | Input Mask |
|-------------|--|----------|------------|
| Name | Common name for the placement type. | YES | |
| Description | Short description of the placement type. | YES | |

Add

Abstract

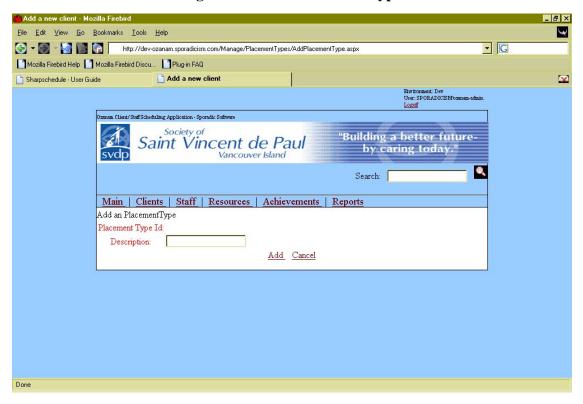
Describes the steps to add a placement type.

Add Placement Type: The following steps will add a new placement type (Figure 5.1, "Add Placement Type"):

1. Click on the Resource tab.

- 2. Select the add placement type link.
- 3. Enter the appropriate fields.
- 4. Click on the add link.

Figure 5.1. Add Placement Type



View

Abstract

Describes the steps to view a placement type.

View Placement Type: In order to view a placement type you must first be able to locate it. This is currently accomplished by viewing a list of placement types and then selecting the one you are interested in from that list (Figure 5.2, "View Placement Type"):

- 1. Click on the Resource tab.
- 2. Select the view/update placement type link.
- 3. Select the placement type you wish to view from the list.
- 4. Click on the edit link.

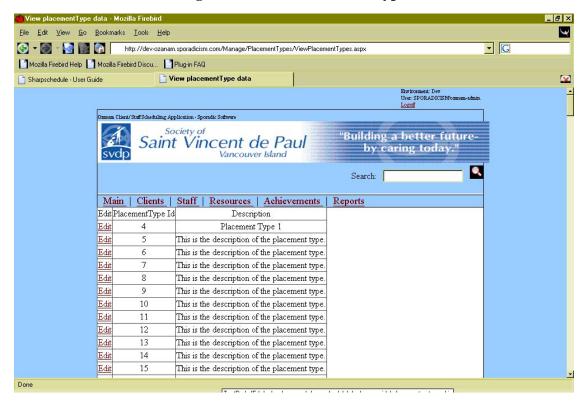


Figure 5.2. View Placement Type

Update

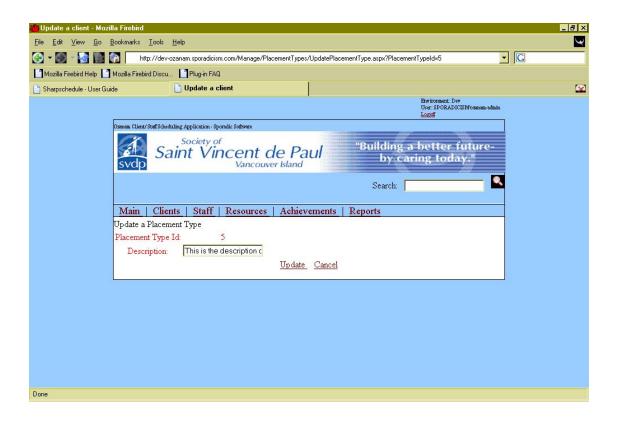
Abstract

Describes the steps to update a placement type.

Update Placement Type: In order to update a placement type you must first be able to locate it. This is currently accomplished by viewing a list of placement types and then selecting the one you are interested in from that list (Figure 5.2, "View Placement Type"):

- 1. Click on the Resource tab.
- 2. Select the view/update placement type link.
- 3. Select the placement type you wish to update from the list by clicking the edit button.
- 4. Edit the placement type.
- 5. Click the update button.

Figure 5.3. Update Placement Type



Chapter 6. Management

Placement Category

[http://www.svdpvictoria.com]



Abstract

Overview of the underlying "soft return" on the outing and provides a closer relation to client goals and sponser expectations. Items in this field can consist of exercise, education, nature appreciation, etc.

Overview

Abstract

Overview of fields available on the placement category management screens, whether the fields are required and any the format that is expected for the filed.

Placement Category entry is currently directed through Resource page, found by clicking on the Resource tab.

The following fields are available:

Table 6.1. Placement Category

| Name | Description | Required | Input Mask |
|------|--|----------|------------|
| | Common name for the placement category. | YES | |
| | Short description of the placement category. | YES | |

Add

Abstract

Desribes the steps to add a placement category.

Add a Placement Category: Used to enter new placement category data (Figure 6.1, "Add Placement Category"):

- 1. Click on the Resource tab.
- 2. Select the add placement category link.
- 3. Enter the appropriate data.
- 4. Click the add button.

Figure 6.1. Add Placement Category



View

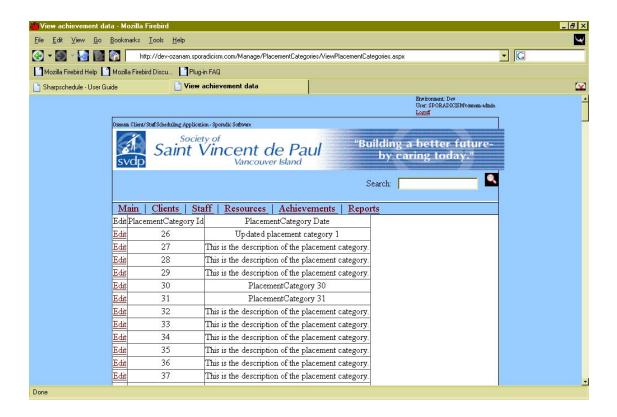
Abstract

Steps to view a placement category.

View: In order to view a placement category you must first be able to identify it. This is currently accomplished by viewing a list of placement categories and selecting the category that you wish to update from that list (Figure 6.2, "View Placement Category"):

- 1. Click on the Resource tab.
- 2. Select the view/update placement category link.
- 3. Select the placement category you wish to update from the list by clicking the edit button.
- 4. Edit the placement category.
- 5. Click the update button.

Figure 6.2. View Placement Category



View

Abstract

Steps to update a placement category.

Figure 6.3. Update Placement Category



Chapter 7. Schedule Management

[http://www.svdpvictoria.com]



Abstract

Manage schedule data

Overview

Abstract

Overview of fields available on the schedule management screens, whether the fields are required and any the format that is expected for the filed.

Schedule generation is currently accessed through the Schedule tab.

The following fields are available:

Table 7.1. Schedule

| Name | Description | Required | Input Mask |
|----------------|--|----------|--|
| Effective Date | Date that the scheduled event begins on. | YES | valid date (i.e. YYYY/ MM/DD or DD/ MM/YYYY) |
| Expiry Date | Date that the scheduled event ends on. | NO | valid date (i.e. YYYY/ MM/DD or DD/ MM/YYYY) |
| Plans | Plan that is associated with this scheduled event. | | lookup |
| Blocks | Time block that the scheduled event occurs in. | YES | lookup |
| Repeat Type | Number of times per week that the scheduled event repeats. | | lookup |

| TODO: Enter add, view and update sections. | | | |
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Chapter 8. Management

Schedule Exception

[http://www.svdpvictoria.com]



Abstract

Manage schedule exception data

Overview

Abstract

Overview of fields available on the schedule exception management screens, whether the fields are required and any the format that is expected for the filed.

The following fields are available:

Table 8.1. Schedule Exception

| Name | Description | Required | Input Mask |
|----------------|--|----------|--|
| Effective Date | Date that the scheduled event begins on. | YES | valid date (i.e. YYYY/ MM/DD or DD/ MM/YYYY) |
| Expiry Date | Date that the scheduled event ends on. | NO | valid date (i.e. YYYY/ MM/DD or DD/ MM/YYYY) |
| Plans | Plan that is associated with this scheduled event. | 1.5 | lookup |
| Blocks | Time block that the scheduled event occurs in. | YES | lookup |
| Repeat Type | Number of times per week that the scheduled event repeats. | | lookup |

| TODO: Do add, view and update sections. | | | |
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Chapter 9. Repeat Type Management

[http://www.svdpvictoria.com]



Abstract

Manage schedule data

Overview

Abstract

Overview of fields available on the repeat type management screens, whether the fields are required and any the format that is expected for the field.

The following fields are available:

Table 9.1. Repeat Type

| Name | Description | Required | Input Mask |
|------|---------------------------------------|----------|------------|
| Name | Name of the repeat type. | YES | |
| * | Short description of the repeat type. | YES | |

TODO: Do add, view and update sections.

Chapter 10. Plan Management

[http://www.svdpvictoria.com]



Abstract

Manage schedule data

Overview

Abstract

Overview of fields available on the plan management screens, whether the fields are required and any the format that is expected for the filed.

The following fields are available:

Table 10.1. Plans

| Name | Description | Required | Input Mask |
|----------------|---|----------|------------|
| Name | Name of the repeat type. | YES | |
| Description | Short description of the repeat type. | YES | |
| Placement Type | Type of activity that will be performed. | YES | lookup |
| Clients | List of clients that will participate in the activity. | · · | lookup |
| Staff | List of staff members that will supervise the activity. | · · | lookup |

TODO: Do add, view and update sections.

Appendix A. Tools

Abstract

Overview of tools that were used on the sharpschedule project.

The following tools are used on the sharpschedule system:

- 1. NAnt [http://nant.sourceforge.net]: Build automation.
- 2. NAntContrib [http://nantcontrib.sourceforge.net]: Build automation.
- 3. Log4net [http://logging.apache.org/log4net]: Logging.
- 4. NUnit [http://nunit.org]: Unit testing framework.
- 5. NUnitAsp [http://nunitasp.sourceforge.net]: Unit testing framework for asp pages.
- 6. Gentle .Net [http://www.mertner.com/confluence/homepage.action]: Persistence framework with configurable database targets.
- 7. Mono [http://mono-project.com/about/index.html]: .net framework for Linux/ Win32.
- 8. MS.Net Framework: .net framework for Win32. [http://asp.net]
- DbDesigner [http://www.fabforce.net/dbdesigner4/]: MySql database modelling.
- 10. MySql [http://www.mysql.com/products/mysql/]: Primary database target.
- 11. MySql Admin [http://www.mysql.com/products/administrator/]: Database administration tool.
- 12. MySql Control Center [http://www.mysql.com/products/mysqlcc/]: Database Client tool.
- 13. Apache FOP [http://xml.apache.org/fop/]: Generation of pdf reports and user documentation.
- 14. MSDE [http://www.microsoft.com/sql/msde/default.asp]: Alternate database...not updated recently :-(