a. On the Workspace home page, click **App Builder**.

b. Select an application.

c. On the Application home page, click **Shared Components** in the center of the page.

d. Under Security, select **Web Credentials**.

2. On the Web Credentials page, click **History**.

   The History page displays recent modifications made to Credentials in the current workspace.

18.7 Managing Legacy Web Services

Legacy Web services enable applications to interact with one another over the web in a platform-neutral, language independent environment.

> **Note:**
>
> The SOAP 1.1 specification is a W3C note. SOAP Version 1.2 specification is a W3C recommendation.
>
> For information about Simple Object Access Protocol (SOAP) see:
>
> http://www.w3.org/TR/SOAP/

18.7.1 About Web Services

In a typical Web services scenario, a business application sends a request to a service at a given URL by using the protocol over HTTP. The service receives the request, processes it, and returns a response. You can incorporate calls with external Web services in applications developed in App Builder.

- Adding a Legacy Chart in Page Designer (page 25-6)
  Add a legacy chart to an existing page in Page Designer.
- Editing Legacy Charts (page 25-8)
  Edit legacy charts in Page Designer.
- About Saving Flash Charts (page 25-11)
  You can add support to save Flash charts locally.
- Using Custom XML with Flash and HTML5 Charts (page 25-11)
  Further customize the look and feel of a legacy chart by adding custom XML.

25.1.1 About Chart Legacy Types

HTML5 charts and Flash charts support in Oracle Application Express is based on the AnyChart HTML5 Chart Component and AnyChart Flash Chart Component. AnyChart is a flexible Flash and JavaScript-based solution that enables developers to create animated, compact, interactive charts.

- About Legacy HTML5 Charts (page 25-2)
- About Legacy Flash Charts (page 25-2)

25.1.1.1 About Legacy HTML5 Charts

HTML5 chart support in Oracle Application Express is based on the AnyChart HTML5 Chart Component. HTML5 charts use a JavaScript chart engine, rendering the chart in SVG format. Flash cannot be rendered on most of the modern mobile devices, however you can now take advantage of our new HTML5 charting solution to incorporate charts in your mobile applications. HTML5 charts are compatible with popular browsers for the following mobile platforms:

- Android: Versions 3.1, 3.2, 4.0, 4.0.3, and 4.1
- IOS (iPhone, iPad, iPod Touch): Safari 3.2 and higher is required

> **Tip:**
>
> To learn more, see http://6.anychart.com/products/anychart/docs.

25.1.1.2 About Legacy Flash Charts

Flash chart support in Oracle Application Express is based on the AnyChart Flash Chart Component. Flash charts are rendered by a browser and require Flash player 9 or later. With AnyChart 6.0, Flash charts are rendered using the FLASH_PREFERRED rendering type. If Flash Player is not available on the device displaying the chart (for example, pages displayed on an iPhone), AnyChart automatically switches to the HTML5 chart engine and displays an SVG-based chart.

25.1.2 Creating SQL Queries for Legacy Charts

Use the following syntax when creating legacy charts.

- Legacy Chart Syntax (page 25-3)

25.1.2.4 Legacy Range Chart Syntax (Flash and HTML5)

Range charts require two values for each bar. To create a range chart, create a chart and provide a SQL query using the following syntax:

```
SELECT link, label, low_value, high_value
FROM   ...
```

25.1.2.5 Legacy Scatter Chart Syntax (Flash and HTML5)

Legacy scatter charts require an *x* value and *y* value for each point. To create a range chart, create a chart and provide a SQL query using the following syntax:

```
SELECT link, label, x_value, y_value
FROM   ...
```

25.1.2.6 Legacy Candlestick Chart Syntax (Flash and HTML5)

Legacy candlestick charts require open, low, high, and close values for each candlestick. To create a candlestick chart, create a chart and provide a SQL query using the following syntax:

```
SELECT link, label, open, low, high, close
FROM   ...
```

25.1.2.7 Legacy Gantt Chart Syntax (Flash Only)

Project Gantt charts require a task name, task id, parent task id, actual start date, actual_end_date, and progress value for each task. Two optional values for planned start date and planned end date can also be used. To create a Project Gantt chart, create a Flash chart and provide a SQL query using the following syntax:

```
SELECT link, task_name, task_id, parent_task_id, actual_start_date, actual_end_date,
progress
FROM   ...
```

Resource Gantt charts require a resource id, resource name, parent resource id, actual start date, and actual end date value for each task. To create a Resource Gantt chart, create a Flash chart and provide a SQL query using the following syntax:

```
SELECT link, resource_id, resource_name, resource_parent_id, actual_start_date,
actual_end_date
FROM   ...
```

To represent parent-child hierarchical data on a Resource Gantt chart, provide a SQL query using `START WITH..CONNECT BY` syntax:

```
SELECT link,
           resource_id,
           resource_name,
           resource_parent_id,
           actual_start_date,
           actual_end_date,
FROM ...
START WITH resource_parent_id IS NULL
CONNECT BY PRIOR resource_id = resource_parent_id
ORDER SIBLINGS BY resource_name
```