
ComponentOne

Scheduler for LightSwitch

Copyright © 2012 ComponentOne LLC. All rights reserved.

Corporate Headquarters

ComponentOne LLC

201 South Highland Avenue
3rd Floor
Pittsburgh, PA 15206 • USA

Internet: info@ComponentOne.com

Web site: <http://www.componentone.com>

Sales

E-mail: sales@componentone.com

Telephone: 1.800.858.2739 or 1.412.681.4343 (Pittsburgh, PA USA Office)

Trademarks

The ComponentOne product name is a trademark and ComponentOne is a registered trademark of ComponentOne LLC. All other trademarks used herein are the properties of their respective owners.

Warranty

ComponentOne warrants that the original CD (or diskettes) are free from defects in material and workmanship, assuming normal use, for a period of 90 days from the date of purchase. If a defect occurs during this time, you may return the defective CD (or disk) to ComponentOne, along with a dated proof of purchase, and ComponentOne will replace it at no charge. After 90 days, you can obtain a replacement for a defective CD (or disk) by sending it and a check for \$25 (to cover postage and handling) to ComponentOne.

Except for the express warranty of the original CD (or disks) set forth here, ComponentOne makes no other warranties, express or implied. Every attempt has been made to ensure that the information contained in this manual is correct as of the time it was written. We are not responsible for any errors or omissions. ComponentOne's liability is limited to the amount you paid for the product. ComponentOne is not liable for any special, consequential, or other damages for any reason.

Copying and Distribution

While you are welcome to make backup copies of the software for your own use and protection, you are not permitted to make copies for the use of anyone else. We put a lot of time and effort into creating this product, and we appreciate your support in seeing that it is used by licensed users only.

This manual was produced using [ComponentOne Doc-To-Help™](#).

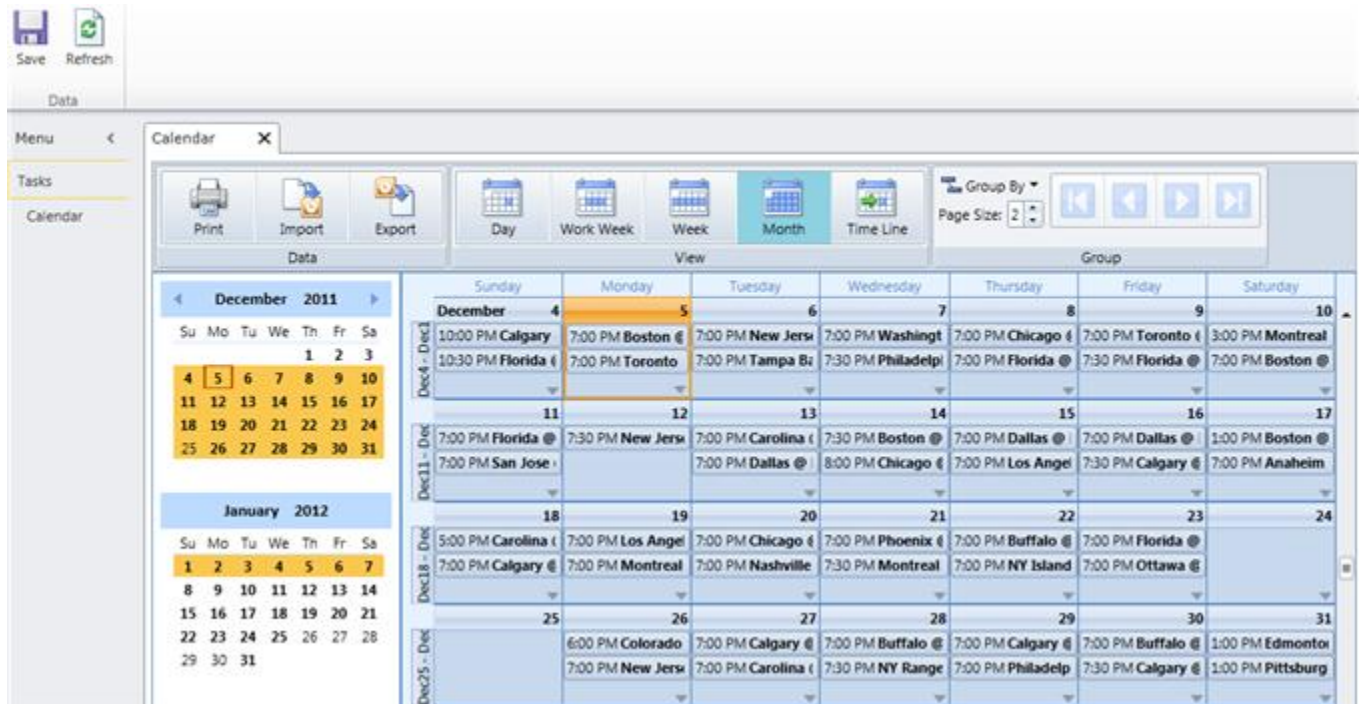
Table of Contents

ComponentOne Scheduler for LightSwitch Overview	1
Installing Scheduler for LightSwitch	1
Creating a ComponentOne Scheduler LightSwitch Project	2
Adding a Calendar Screen	2
About This Documentation	3
Key Features	5
Scheduler for LightSwitch Quick Start	6
Step 1: Creating a LightSwitch Project	6
Step 2: Defining the Data	6
Step 3: Creating a Screen	7
Step 4: Running the Application	7
Binding C1Scheduler to a Data Source	9
Adding a Primary Data Source	9
Adding a ComponentOne Calendar Screen	10
Mapping to the Primary Data Source	10
Adding Other Data Sources	12
Changing the C1Scheduler Appearance	15
Printing, Importing, and Exporting	16
Changing the View	17
Grouping	19
Appointments	20
Labels	21
Availability Status	22
Reminders	23
Contacts	24
Categories	25
Resources	26
Working with Appointments at Run Time	26
Adding and Saving an Appointment	27

Editing an Appointment.....	27
Deleting an Appointment.....	27
Recurring Appointments.....	27
Scheduler for LightSwitch Tutorial.....	30
Step 1: Creating a LightSwitch Project	30
Step 2: Adding Data Sources	30
Step 3: Adding Screen Templates	32
Step 4: Mapping a Screen to the Primary Data Source.....	32
Step 5: Adding Contacts and Resources Data Sources	34
Step 6: Running the Application	38
Scheduler for LightSwitch Sample.....	39
Scheduler for LightSwitch Task-Based Help	39
Adding Background Colors for Groups	40
Customizing a Calendar.....	42
Printing a Schedule.....	43
Importing Data	44
Exporting Data.....	44

ComponentOne Scheduler for LightSwitch Overview

ComponentOne Scheduler™ for LightSwitch provides a C1Scheduler LightSwitch control extension that consumes LightSwitch data sources to provide an interactive appointment calendar with Outlook-style scheduling functionality. It contains an integrated toolbar for import/export, view selection, and grouping.

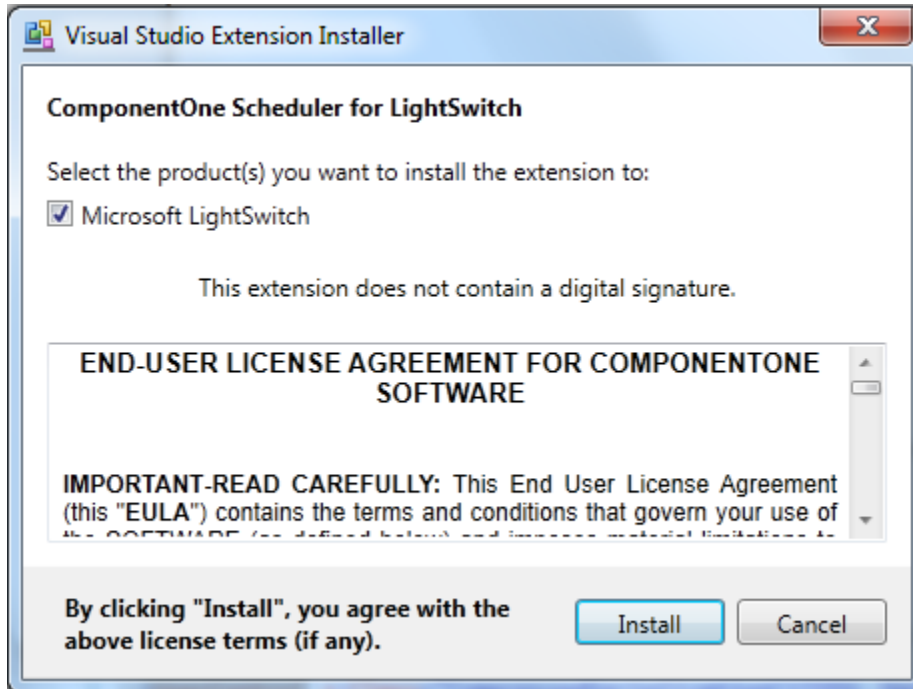


Installing Scheduler for LightSwitch

Before installing **ComponentOne Scheduler for LightSwitch**, make sure you have downloaded and installed Visual Studio LightSwitch at <http://www.microsoft.com/visualstudio/en-us/lightswitch>.

To install **Scheduler for LightSwitch**:

1. Double-click the **C1.LightSwitch.Schedule.vsix**.
2. In the **Visual Studio Extension Installer** window, make sure **Microsoft LightSwitch** is selected and click **Install**.



3. Once the installation is complete, click **Close**.

Creating a ComponentOne Scheduler LightSwitch Project

To create a new **Scheduler for LightSwitch** project, complete the following steps:

1. In Visual Studio, select **File | New | Project**.
2. Under **Installed Templates**, select **LightSwitch**. The .NET Framework 4 must be selected in order to create a LightSwitch application.
3. Choose **LightSwitch Application** for the preferred language, enter a name for the application, and click **OK**. Your LightSwitch project is created. You'll notice it contains the **Data Sources** and **Screens** folders.
4. In the Solution Explorer, right-click the project node and select **Properties**.
5. In the Properties window, select the **Extensions** tab and make sure the **Microsoft LightSwitch Extensions** and **ComponentOne Scheduler for LightSwitch** items are selected and have the **Use in new projects** fields selected.

Adding a Calendar Screen

You can use the **ComponentOne Calendar Screen** template to create a fully functional schedule.

To add a **ComponentOne Calendar Screen** template to your project, follow these steps:

1. In the Solution Explorer, right-click the **Screens** folder and select **Add Screen**.
2. In the list of screen templates, select **ComponentOne Calendar Screen**.

Note: If you do not see the **ComponentOne Calendar Screen** option, make sure you have [installed Scheduler for LightSwitch](#) (page 1) and [included the extension](#) (page 2) in the project.

3. Under **Provide screen information**, enter a **Screen Name** and select a data source from the list under **Screen Data**.
4. Click **OK**.

About This Documentation

Acknowledgements

Microsoft, Windows, Visual Studio, LightSwitch, Silverlight, are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

ComponentOne

If you have any suggestions or ideas for new features or controls, please call us or write:

Corporate Headquarters

ComponentOne LLC

201 South Highland Avenue

3rd Floor

Pittsburgh, PA 15206 • USA

412.681.4343

412.681.4384 (Fax)

<http://www.componentone.com>

ComponentOne Doc-To-Help

This documentation was produced using [ComponentOne Doc-To-Help® Enterprise](#).

Key Features

The following are some of the main features of **ComponentOne Scheduler for LightSwitch** that you may find useful:

- **Complete Outlook-style Scheduling**

Schedule one-time, all day, or recurring appointments with reminders, labels, and availability status just as in Microsoft Outlook. Stay organized with categories, resources, and contacts linked to each appointment.
- **Five Built-in Default Views**

The C1Scheduler control includes five built-in default views, allowing you to offer a variety of ways for users to view their schedules. View the schedule by day, week, work week, month, or time line. You can also create your own custom views. See [Changing the View](#) (page 17) for more information.
- **Reminders**

Scheduler can display reminder dialogs at specified times before an appointment occurs. Users have the option to dismiss one or more appointments, open the appointment, or reset the reminder to appear again later (snooze). See the [Reminders](#) (page 23) topic for more information.
- **Resource Grouping**

Group appointments by contacts, resources or categories to create a multi-column layout where each column corresponds to a different item. Navigate through any number of grouped items with ease. Simply drag an appointment to reassign it to a different resource, category or contact. Grouping is supported in all scheduler views. See the [Grouping](#) (page 19) topic to learn more about this great feature.
- **Time Line View**

Give your users a Time Line view for displaying appointments in a horizontal layout. This view is useful when trying to see multiple groups at once to schedule a meeting. In this view the time is displayed horizontally and groups are arranged vertically, much like the 'Schedule' view in Microsoft Outlook 2010. See [Changing the View](#) (page 17) for an example of the Time Line view.
- **Pre-built Ribbon Toolbars**

Choose from **Data** (*Print, Import, Export*), **View** (*Day, Work Week, Week, Month, Time Line*), and **Group** button groups to add to your application. They are already built and wired to the calendar. All you have to do is select a check box. See [Changing the C1Scheduler Appearance](#) (page 15) for an overview of these button groups.
- **Use Multiple Data Sources**

In addition to selecting primary data source for the screen (appointment information), **Scheduler for LightSwitch** provides placeholders to connect to data sources for categories, contacts, and resources. These tables don't even need to be related. **Scheduler for LightSwitch** handles associations for you. See [Binding C1Scheduler to a Data Source](#) (page 9) for more information.
- **Import and Export Data**

Save or load data in supported formats: XML or iCalendar. See [Printing, Importing, and Exporting](#) (page 16) for more information.

Scheduler for LightSwitch Quick Start

The following quick start guide is intended to get you up and running with **Scheduler for LightSwitch**. In this quick start you'll create a new LightSwitch project, add a primary data source, and bind the data source to a screen template to create the schedule UI.

Step 1: Creating a LightSwitch Project

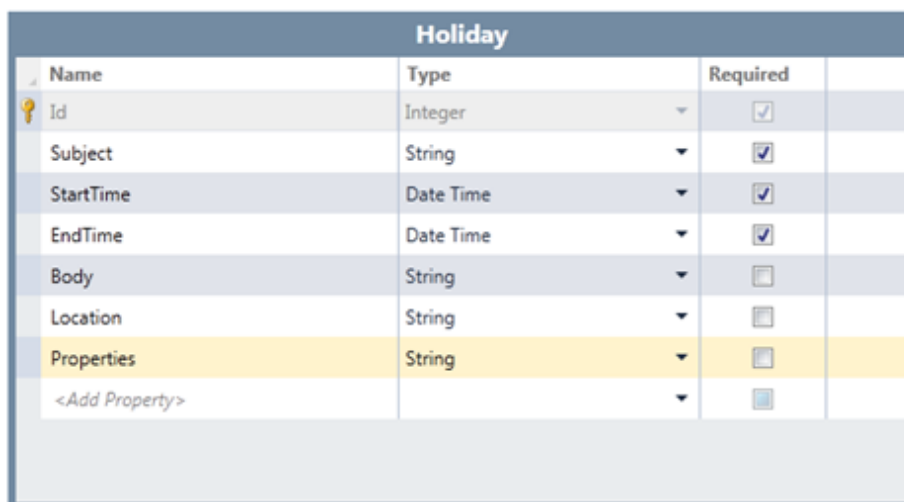
Begin by creating a LightSwitch project.

1. In Visual Studio, select **File | New | Project**.
2. Under **Installed Templates**, select **LightSwitch**. The .NET Framework 4 must be selected in order to create a LightSwitch application.
3. Choose **LightSwitch Application** for the preferred language, enter a name for the application, and click **OK**. Your LightSwitch project is created. You'll notice it contains the **Data Sources** and **Screens** folders.
4. In the Solution Explorer, right-click the project node and select **Properties**.
5. In the Properties window, select the **Extensions** tab and make sure the **Microsoft LightSwitch Extensions** and **ComponentOne Scheduler for LightSwitch** items are selected and have the **Use in new projects** fields selected.

Step 2: Defining the Data

In this step, you will create a primary data source that will bind to the calendar screen to create a fully functional schedule.

1. In the Solution Explorer, right-click the **Data Sources** folder and select **Add Table**.
2. Set up the table as in the following example:



Holiday			
Name	Type	Required	
Id	Integer	<input checked="" type="checkbox"/>	
Subject	String	<input checked="" type="checkbox"/>	
StartTime	Date Time	<input checked="" type="checkbox"/>	
EndTime	Date Time	<input checked="" type="checkbox"/>	
Body	String	<input type="checkbox"/>	
Location	String	<input type="checkbox"/>	
Properties	String	<input type="checkbox"/>	
<Add Property>		<input type="checkbox"/>	

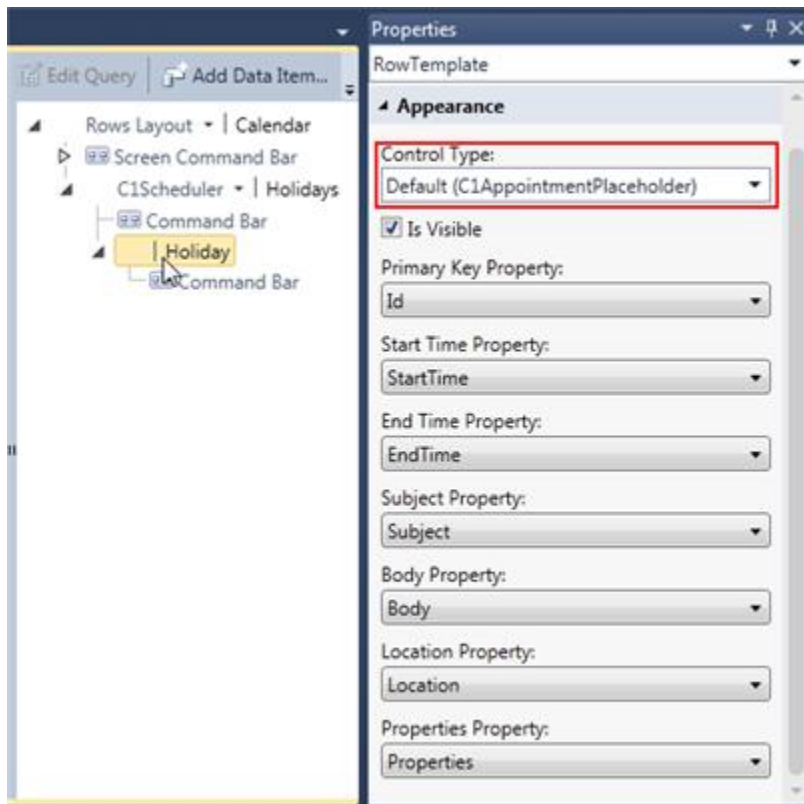
3. Select the table and then select the **Properties** row. In the Visual Studio Properties window, delete **255** for the **MaximumLength** property. This will allow the control to manage recurring appointments and maintain relationships with optional secondary tables.

In the next step, you will add a screen template to be associated with the table. This is necessary to create the UI for the schedule.

Step 3: Creating a Screen

Once you have a data source, you can add a screen to bind to it. The **ComponentOne Calendar Screen** template will create the schedule for you, so you don't have to enter a single line code. It will be mapped to the **Holiday** table you created in step 2.

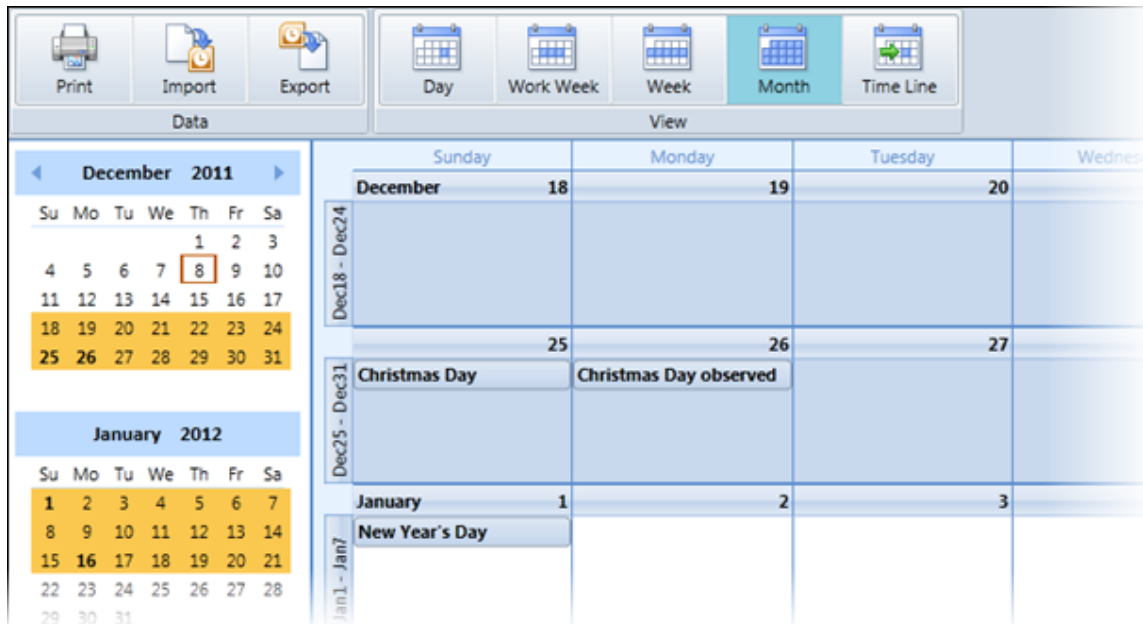
1. In the Solution Explorer, right-click the **Screens** folder and select **Add Screen**.
2. Select **ComponentOne Calendar Screen** in the list of screen templates.
3. Use the default name **Calendar** under **Screen Name**, select the **Holidays** data source from the **Screen Data** list, and click **OK**.
4. Select the **Holiday** item in the calendar designer, notice it is a **C1AppointmentPlaceholder** control, and set the properties as in the following image. These properties map to the properties you added in the **Holiday** table.



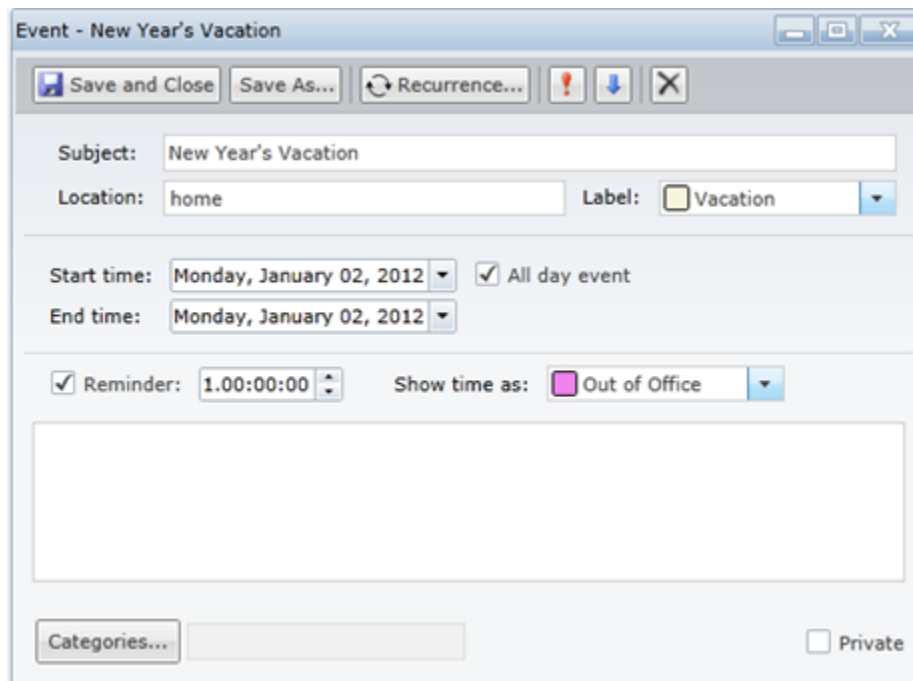
Now it's time to run the application and check out the schedule!

Step 4: Running the Application

Press **F5** to run the application. A fully functional schedule appears.



In the default **Month** view, double-click a date to add an event to the holiday schedule. In the **Event** dialog box, add a *Subject*, *Location*, *Label*, *Start* and *End time*, or anything else you would like to assign to the event.



Click **Save and Close** to close the **Event** dialog box and add the event to the schedule.

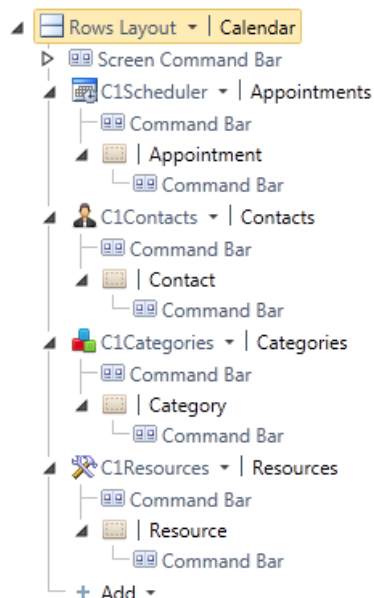
Dec		
January	1	2
Jan 1 - Jan 7	New Year's Day	New Year's Vacation home

Binding C1Scheduler to a Data Source

ComponentOne Scheduler for LightSwitch allows you create a primary appointments data source to provide data for a schedule. Once you have a primary data source in your project, you can add a ComponentOne Calendar Screen, which is a screen template that includes a properly configured instance of the C1Scheduler control extension, and bind it to the data, creating a fully functional, ready-to-use schedule.

C1Scheduler also includes non-visual controls (**C1Categories**, **C1Contacts**, and **C1Resources**) for attaching additional data sources to the primary appointments data source. See [Adding Other Data Sources](#) (page 12) for more information.

These controls provide the mapping between C1Scheduler's internal storage model and the underlying LightSwitch data sources.




Adding a Primary Data Source

When binding C1Scheduler to the primary appointments data source, the data source must have at least seven specific properties set in order for the binding to work correctly. These properties include: *Id*, *Subject*, *StartTime*, *EndTime*, *Body*, *Location*, and *Properties*. The actual property names can be different, but the date/time and subject properties must be marked as required. The primary key property can be an integer, string, or [GUID](#). The remaining string properties must be present, although they need not contain any data. The final property (**Properties**) is used to store internal data in XML format; therefore, its **Maximum Length** setting (default: 255) should be cleared.

To add a data source to bind to C1Scheduler, follow these steps:

1. Right-click the **Data Sources** folder in the Solution Explorer, and choose **Add Table**.
2. Enter **Holiday** in the table header to set the table name.
3. Under **Name**, enter **Subject** where it says *<Add Property>*.
4. Set the **Type** to *String* and make sure the **Required** checkbox is selected. Do the same for the remaining six properties, using the values in the following example:

Holiday			
Name	Type	Required	
 Id	Integer	<input checked="" type="checkbox"/>	
Subject	String	<input checked="" type="checkbox"/>	
StartTime	Date Time	<input checked="" type="checkbox"/>	
EndTime	Date Time	<input checked="" type="checkbox"/>	
Body	String	<input type="checkbox"/>	
Location	String	<input type="checkbox"/>	
Properties	String	<input type="checkbox"/>	
<i><Add Property></i>		<input type="checkbox"/>	

5. Click the **Properties** row and in the Visual Studio Properties window, delete **255** for the **MaxLength** property. This allows the property to hold unlimited text, so all necessary information can be stored by the control.

Adding a ComponentOne Calendar Screen

ComponentOne Calendar Screen is a screen template that includes a properly configured instance of the C1Scheduler control extension. This is the easiest way to use the product.

Once you have created a table to hold the data for the C1Scheduler extension, you can add a screen template that will be bound to the table.

To do this, follow these steps:

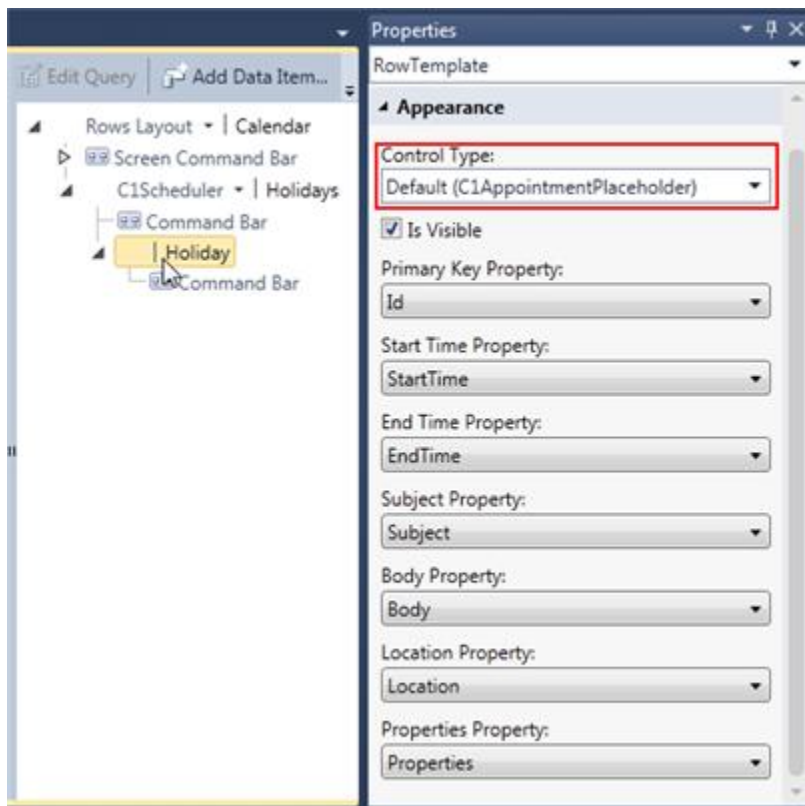
1. In the Solution Explorer, right-click the **Screens** folder and select **Add Screen**.
2. Select **ComponentOne Calendar Screen** in the list of screen templates.
3. Enter a name for the screen under **Screen Name**, select the data source, **Holidays** in this example, from the **Screen Data** list, and click **OK**.

The screen is created. The table properties must be mapped to the storage model for the schedule to be properly displayed. See [Mapping to the Primary Data Source](#) (page 10).

Mapping to the Primary Data Source

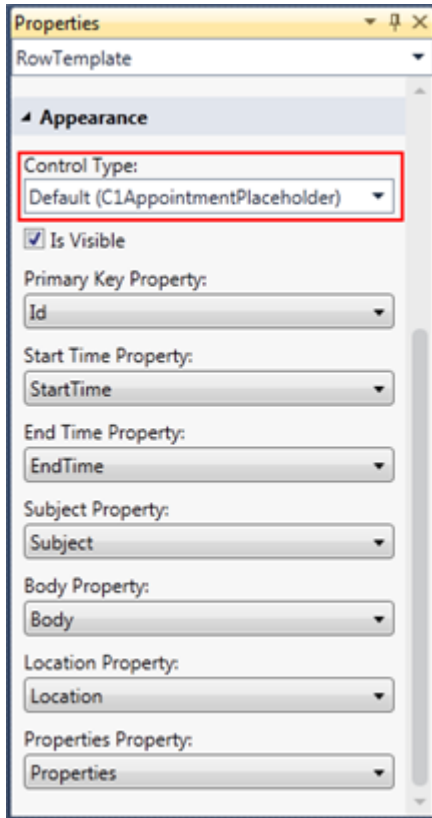
The mapping between the primary table properties and the **C1Scheduler** storage model is handled by the **C1AppointmentPlaceholder** element.

If you select the table in the screen designer and view the Visual Studio **Properties** window, you'll notice the **Control Type** for the primary table, **Holidays** in this example, is **Default (C1AppointmentPlaceholder)**.



The **Primary Key** property must be set to the name of an integer, string, or GUID property that uniquely identifies an appointment record in the data source. The remaining drop-down controls let you specify date/time or string property names, as appropriate.

Set the properties as shown in the following image:




Once the property mappings are set up, the C1Scheduler control automatically handles all [CRUD \(Create, Read, Update, and Delete\)](#) operations on appointments. No coding is required to synchronize the model with the underlying data storage.

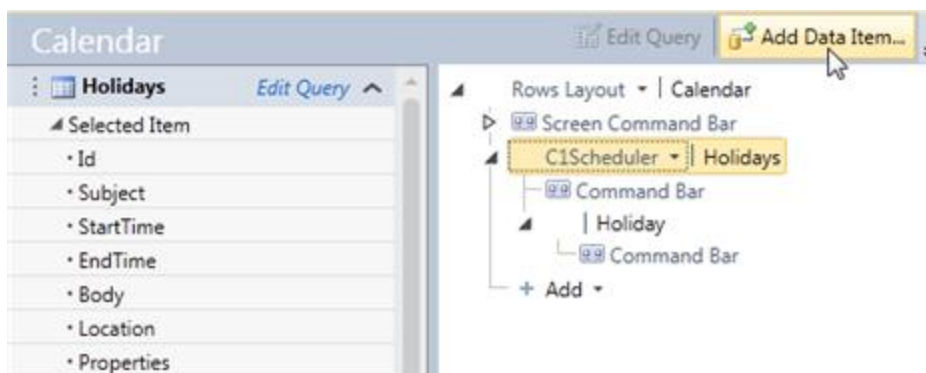
Adding Other Data Sources

You can easily associate additional, separate data sources, such as a contacts list, with a C1Scheduler control. In this example, we have already associated the **Holidays** data source with the **Calendar** screen, and now we are going to add a **Contacts** data source. To do this, follow these steps:

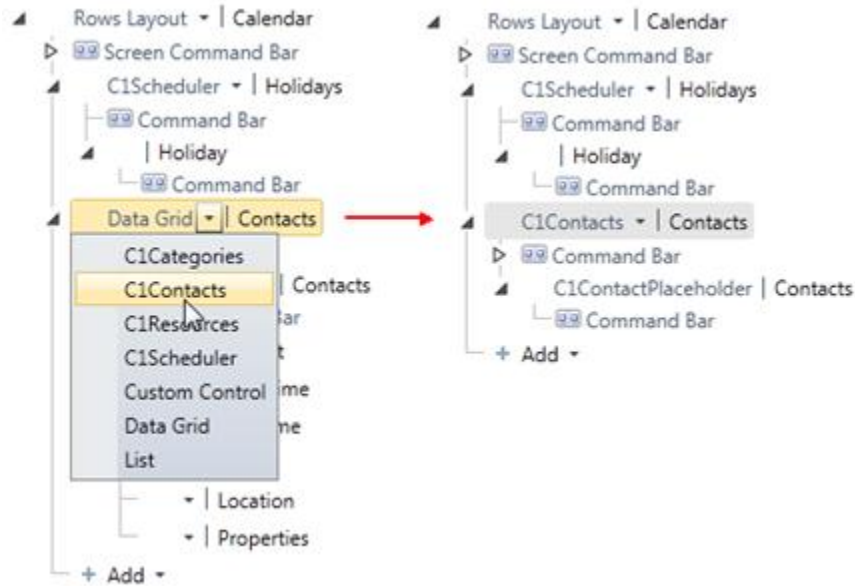
1. First, add the data source to the project as you did for the C1Scheduler data source, only you must set two required properties instead of seven. The **Id** and **Text** properties must be included and marked as required. You can also add other properties, if you like, but this is optional. Set the **Id** and **Text** properties as seen in the following image:

Contacts			
Name	Type	Required	
 Id	Integer	<input checked="" type="checkbox"/>	
Text	String	<input checked="" type="checkbox"/>	
Caption	String	<input checked="" type="checkbox"/>	
Color	String	<input type="checkbox"/>	
<Add Property>		<input type="checkbox"/>	

- In the Solution Explorer, double-click the screen you are associating with the separate data source.
- Select C1Scheduler and click **Add Data Item** to add the desired query, **Contacts**, to the screen.



- In the **Add Data Item** dialog box, select **Query**, choose the new data source, and click **OK**. When selecting the data source, choose the **TableName (All)** return type to ensure the collection is returned.
- Click **Add** drop-down list and select **Contacts** to add the collection to the end of the screen layout. Then change the default control name, **Data Grid**, to **C1Contacts** as shown in the following figure.

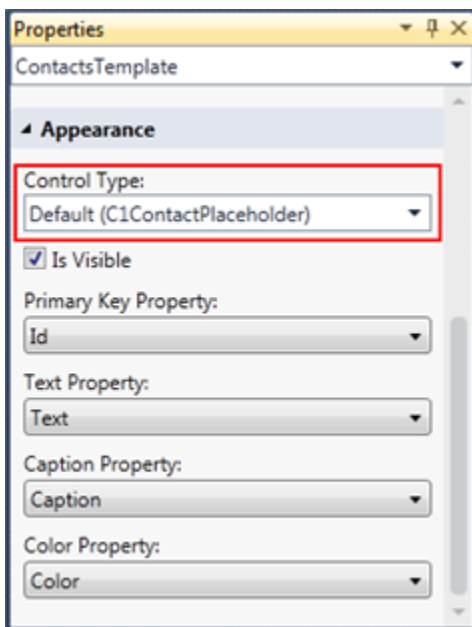


The mapping between the **Contacts** table properties and the **C1Contacts** storage model is handled by the **C1ContactPlaceholder** element, similar to the way the **C1Scheduler** storage model is handled by the **C1AppointmentPlaceholder** element.

If you select the table in the screen designer and view the Visual Studio **Properties** window, you'll notice the **Control Type** for the **Contacts** table is **Default (C1ContactPlaceholder)**.

Just as you must do with the **C1AppointmentPlaceholder**, the **Primary Key** property must be set to the name of an integer, string, or GUID property that uniquely identifies a contact record in the data source. The remaining drop-down controls let you specify string property names, as appropriate.

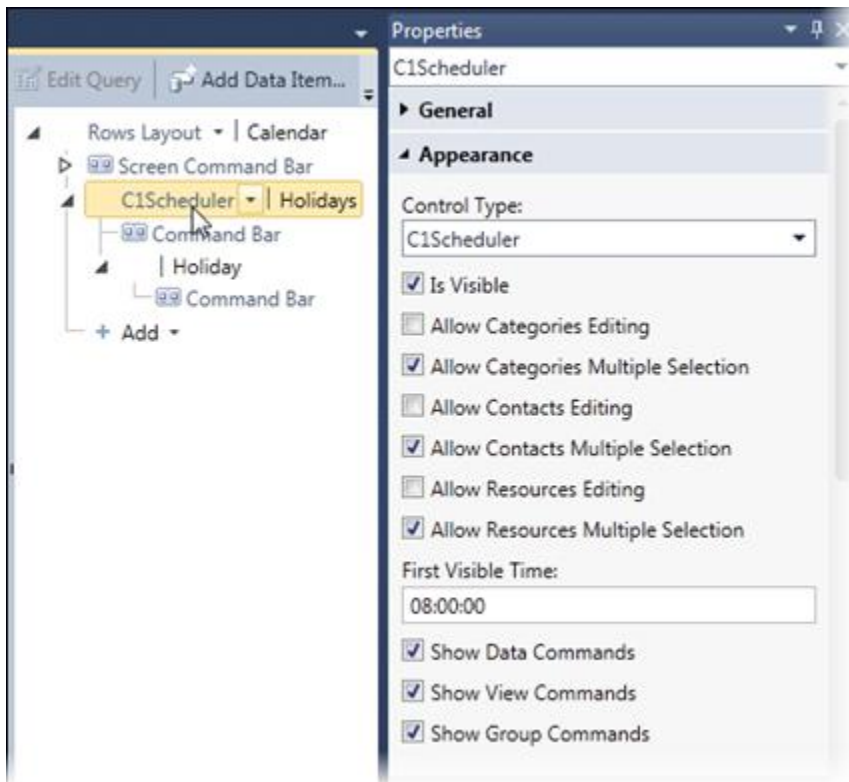
6. Set the properties as shown in the following image:



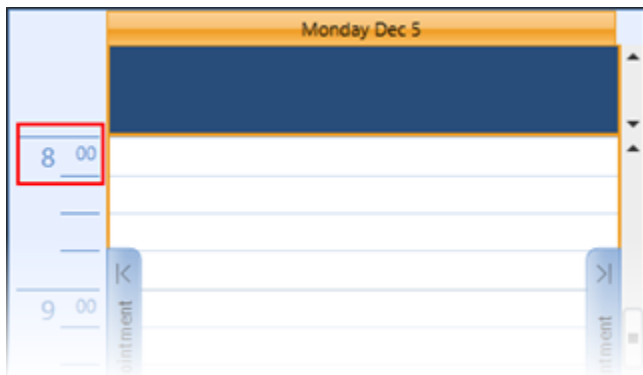
Repeat this process for the **C1Categories** and **C1Resources** storage models, if desired. Mappings are handled by the **C1CategoryPlaceholder** and **C1ResourcePlaceholder**, respectively. The properties are the same as for the **ContactsTemplate**.

Changing the C1Scheduler Appearance

The C1Scheduler control exposes a small set of appearance properties that determine whether the attached data sources (if any) support editing and multiple selection. To set these properties, select C1Scheduler in the screen designer and view the **Properties** window.



The **First Visible Time** property specifies the initial time slot displayed for day and week views.



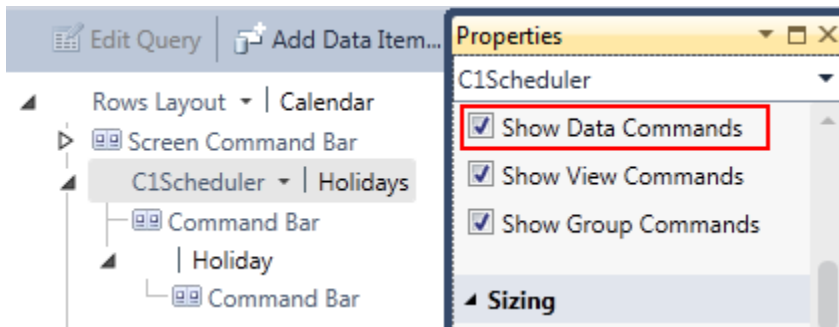
The remaining properties control which toolbar groups (**Data**, **View**, **Group**) are visible in the calendar.



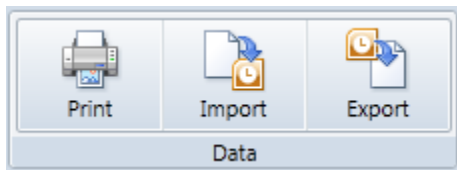
Printing, Importing, and Exporting

The **Data** group of the C1Scheduler toolbar allows you to print a calendar, import data from an iCal or XML file, or export data to an iCal or XML file.

To make the **Data** group visible in the toolbar at run time, check the **Show Data Commands** check box in the C1Scheduler Properties window.



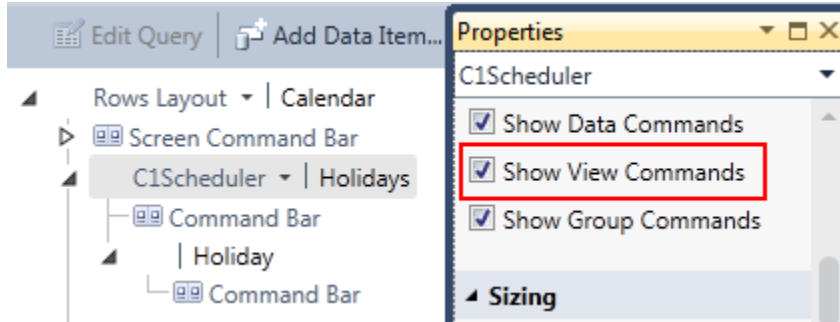
Click the **Print**, **Import**, or **Export** button to perform each task.



- Clicking **Print** will print everything visible in the current view of the schedule, excluding the toolbar and calendars. See [Printing a Schedule](#) (page 43).
- When importing, select the desired iCal **.ics** or **.xml** file and click **Open**. The schedule is updated. Note that data can only be imported from an XML file if the XML file was previously exported from C1Scheduler. See [Importing Data](#) (page 44).
- When exporting, in the **Save As** dialog box, enter a name for the schedule in the **File name** text box, select either **.ics** or **.xml** in the **Save as type** text box, and click **Save**. See [Exporting Data](#) (page 44).

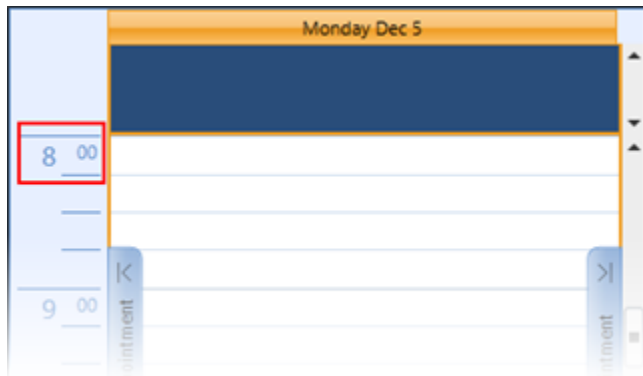
Changing the View

To make the **View** group visible in the toolbar at run time, check the **Show View Commands** check box in the C1Scheduler Properties window.



You can change the view of the calendar at run time by clicking one of the buttons in the **View** toolbar group. View options include the following:

Day



Work Week



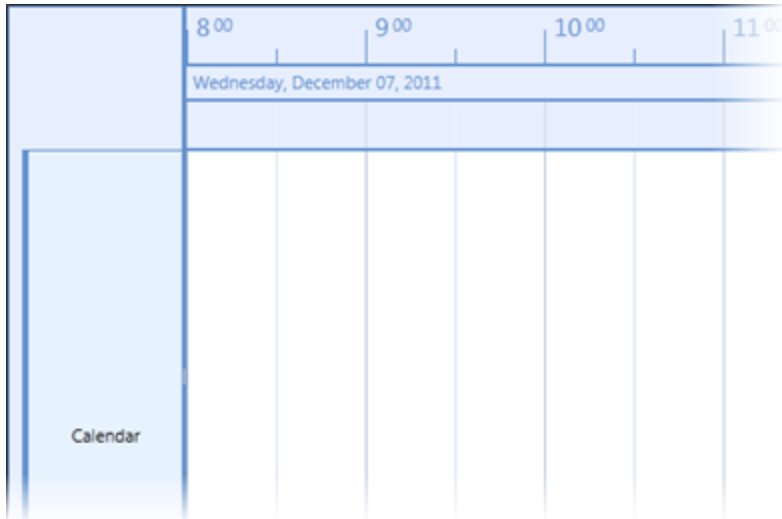
Week

	Sunday Dec 4	Monday Dec 5	Tuesday Dec 6	Wednesday Dec 7	Thursday Dec 8	Friday Dec 9	Saturday Dec 10
8 00							
9 00							
10 00							
11 00							
12 pm							

Month

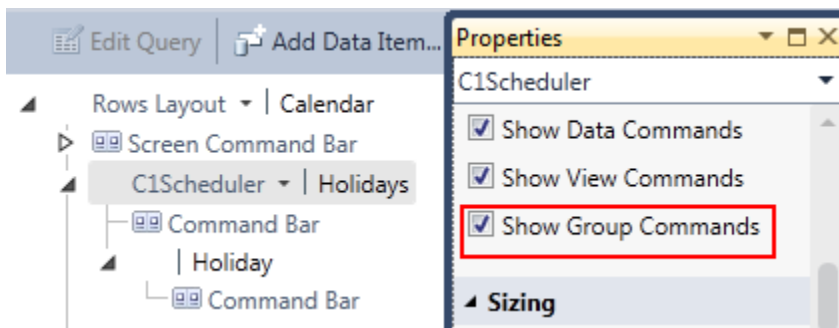
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
December	4	5	6	7	8	9	10
11		12	13	14	15	16	17
18		19	20	21	22	23	
25		26	27	28	29	30	

Time Line



Grouping

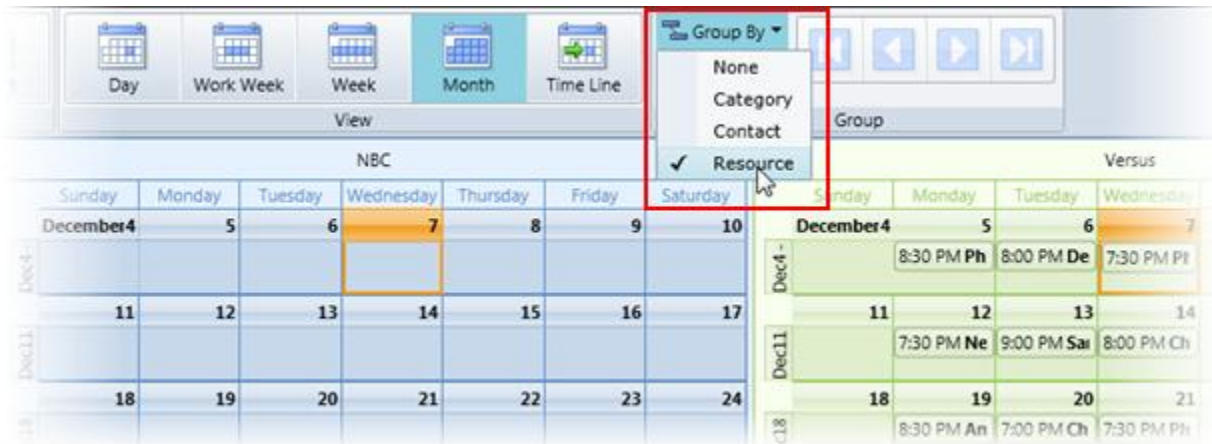
To make the **Group** items visible in the C1Scheduler toolbar at run time, check the **Show Group Commands** check box in the C1Scheduler Properties window.



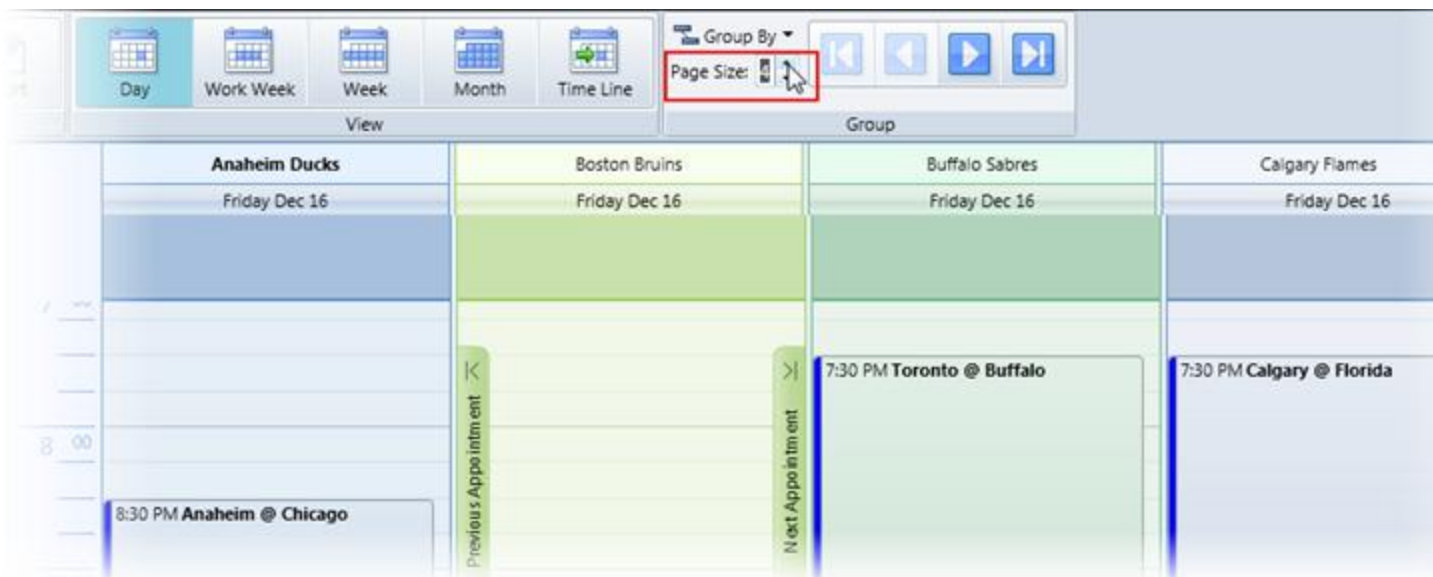
At run time, grouping allows you to view multiple schedules, in any view, side-by-side. **ComponentOne Scheduler for LightSwitch** allows you to group schedules by category, contact, or resource.

For example, look at the Scheduler for LightSwitch demo at <http://demo.componentone.com/LightSwitch/Scheduler/>. The application shows the television broadcasting schedule for hockey games. The categories are regions (e.g., Northeast, Southeast, etc.), the contacts are teams (e.g., Anaheim Ducks, Boston Bruins, etc.), and the resources are the television stations on which the games are being aired (e.g., NBC, Versus).

If you wanted to see which games are on NBC and which are on the Versus station, you could **Group By Resource** to view the schedules side-by-side and compare.



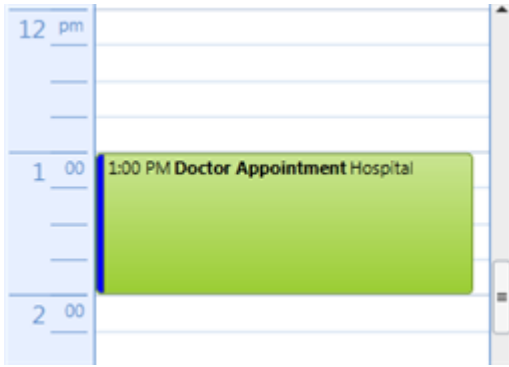
You can also determine the number of schedules that appear at one time by setting the **Page Size** in the **Group** toolbar group. Use the forward and back buttons to page through the schedules.



You can even determine the background colors for each of the groups. See [Adding Background Colors for Groups](#) (page 40).

Appointments

An appointment represents a period of time and detailed information about events that will take place during that period of time. Appointments can span from a specified duration, such as 30 minutes, to multi-day events.



New appointments can be added or existing appointments can be edited by simply double-clicking the time of the appointment.

The **Appointment** dialog box is used to schedule new appointments, allowing you to set a subject, location, label, start and end time, reminder, availability status, and whether the appointment is an all day event and recurring over a specified period of time. You can also specify any resources, categories, and contacts here.

A screenshot of a dialog box titled 'Event - Sales Meeting'. The dialog has a toolbar with buttons for 'Save and Close', 'Save As...', 'Recurrence...', a warning icon, a down arrow, and a close icon. The main area contains several fields: 'Subject' with the value 'Sales Meeting'; 'Location' with 'East Coast Office'; 'Label' with a dropdown menu showing 'None'; 'Start time' and 'End time' both set to 'Tuesday, December 06, 2011'; a checked 'All day event' checkbox; a checked 'Reminder' checkbox with a value of '00:15:00'; and a 'Show time as' dropdown menu set to 'Busy'. At the bottom, there are buttons for 'Resources...', 'Categories...', and 'Contacts...'. The 'Contacts...' button has a list of names: 'Rick Connell; Linda Wise;'. A 'Private' checkbox is also present at the bottom right.

Labels












A label is simply a color-coded marker that can be added to appointments so that you and others know what type of appointment it is without even having to view its details.

There are twelve predefined labels available in **Scheduler for Silverlight**. The color of the label is visible in every data view in the C1Scheduler control.

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
December	11	12	13	14	15	16	17
Dec11 - De		1:00 PM Doctor Apointr		5 Year Anniversary			
Dec18 - De	18	19	20	21	22	23	24
				Vacation			
Dec25 - De	25	26	27	28	29	30	31
	Christmas Day	Christmas Day observed					




Predefined Labels

The predefined labels include the following:

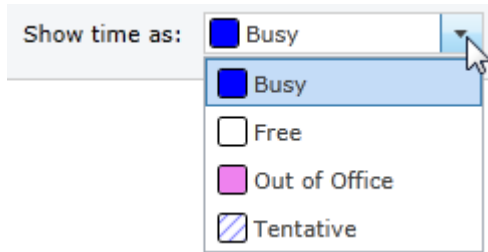
Label	Color
None	<input type="checkbox"/>
Important	
Business	
Personal	
Vacation	
Deadline	
Must Attend	
Travel Required	
Needs Preparation	
Birthday	
Anniversary	
Phone Call	

Availability Status

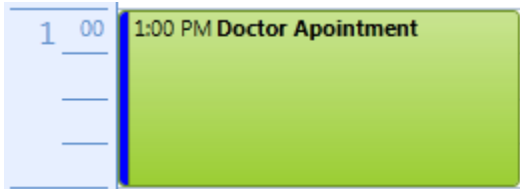
The availability status lets everyone know if you will be available at the time when an appointment is scheduled. There are four predefined availability statuses available in **Scheduler for Silverlight**: *Busy*, *Free*, *Out of Office*, and *Tentative*. The status is specified by the following colors:

Status	Color
Busy	
Free	<input type="checkbox"/>
Out of Office	
Tentative	

The status can be specified in the **Appointment** dialog box next to the **Show time as** drop-down list.

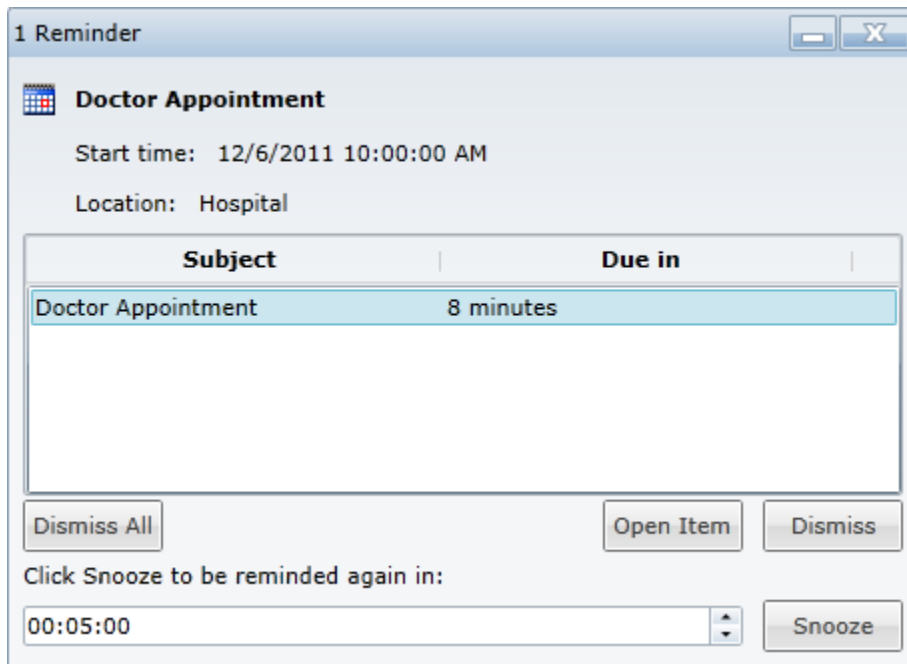


The color of the availability status is visible in all views of a schedule except month view. For appointments, the color appears in the area to the left of the appointment.



Reminders

Appointment reminders display a **Reminder** dialog box at a specified time before the appointment occurs. In the **Reminder** dialog box, you have the option of dismissing one or more appointments (if multiple appointments are due), opening the appointment, or resetting the reminder to appear again in a set amount of time.



Reminders can be set when creating an appointment by checking the **Reminder** check box and setting the amount of time before the appointment that you would like the reminder to appear in the **Reminder** drop-down list.

Appointment - Doctor Appointment

Save and Close Save As... Recurrence... ! ↓ ×

Subject: Doctor Appointment

Location: Hospital Label: Personal

Start time: Tuesday, December 06, 2011 10:00 AM All day event

End time: Tuesday, December 06, 2011 11:00 AM

Reminder: 00:30:00 Show time as: Busy

Contacts

A list of contacts usually includes all of the people with whom you frequently communicate. You might assign a contact to an appointment if this is the person you need to communicate with regarding the appointment. You can add contacts to the **Contacts** at run time. Contacts are optional, and an appointment can have one or more contacts assigned to it.

To assign a contact to an appointment at run time:

1. Click the **Contacts** button in the **Appointment** dialog box.
2. Select the check box next to the desired contact and click **Ok**.

Contacts

Selected:

Janie Richardson;

Available:

Alexander Cooley

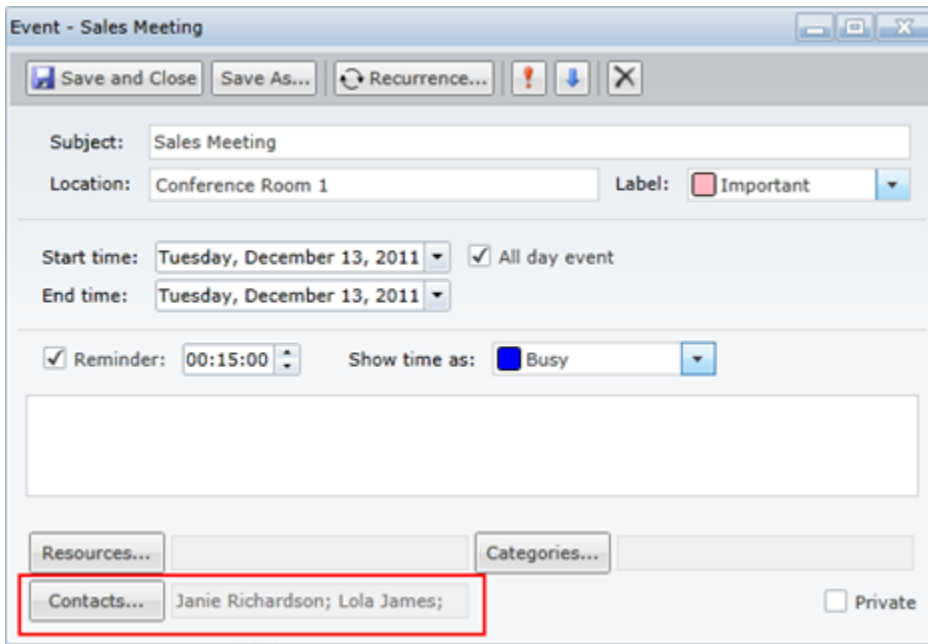
Janie Richardson

John Smith

Lola James

Ok Cancel

The selected contact now appears in the **Contacts** text box. Note that you can add multiple contacts to an appointment.



Categories

A category is a keyword or a phrase used to help you organize your appointments. There are 20 predefined categories available in **Scheduler for Silverlight** to assign to appointments. Categories are optional, and an appointment can have one or more categories assigned to it.

Predefined Categories

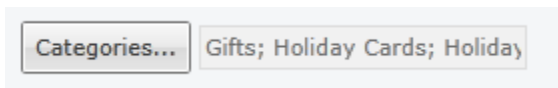
The predefined categories include the following:

• Business	• Key Customer
• Competition	• Miscellaneous
• Favorites	• Personal
• Gifts	• Phone Calls
• Goals/Objectives	• Status
• Holiday	• Strategies
• Holiday Cards	• Suppliers
• Hot Contacts	• Time&Expenses
• Ideas	• VIP
• International	• Waiting

To assign a category to an appointment at run time:

1. Click the **Categories** button in the **Appointment** dialog box.

2. Select the check box next to the desired category and click **Ok**. The category appears next to the **Categories** text box. Note that you can assign multiple categories to an appointment.

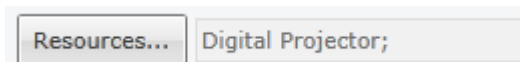


Resources

A resource is a keyword or a phrase that defines a source of support for a particular task. Resources are optional and an appointment can have one or more resources assigned to it.

To assign a resource to an appointment at run time:

1. Click the **Resources** button in the **Appointment** dialog box.
2. Select the check box next to the desired resource and click **Ok**. The resource appears next to the **Resources** text box. Note that you can assign multiple resources to an appointment.



Working with Appointments at Run Time

Appointments can be created at run time by double-clicking the time for the appointment to begin, which will open the **Appointment** dialog box. For more information about appointments, see [Appointments](#) (page 20).

A screenshot of the "Event - Sales Meeting" dialog box. The window title is "Event - Sales Meeting". The interface includes a toolbar with buttons for "Save and Close", "Save As...", "Recurrence...", a warning icon, a down arrow, and a close icon. The "Subject" field contains "Sales Meeting". The "Location" field contains "East Coast Office" and the "Label" dropdown is set to "None". The "Start time" is "Tuesday, December 06, 2011" and the "End time" is also "Tuesday, December 06, 2011". The "All day event" checkbox is checked. The "Reminder" is set to "00:15:00" and "Show time as" is set to "Busy". There is a large empty text area for notes. At the bottom, there are buttons for "Resources...", "Categories...", and "Contacts...". The "Contacts" field contains "Rick Connell; Linda Wise;" and there is a "Private" checkbox which is unchecked.

Pressing the following keys while in the **Appointment** dialog box will result in the following actions:

Key	Action
TAB or ENTER	Moves the cursor from one field to another according to the tab order.
ESC	Closes the Appointment dialog box without saving any changes.

Adding and Saving an Appointment

Appointments can be added to the schedule using the **Appointment** dialog box.

1. Double-click the time of the appointment. The **Appointment** dialog box appears.
2. Specify a **Subject**, **Location** and any additional information you would like to assign to the appointment.
3. Click the **Save and Close** button to add the new appointment to the schedule.

Editing an Appointment

Appointments can be changed and updated through the **Appointment** dialog box.

1. Double-click an existing appointment to open the Appointment dialog box.
2. Edit any of the desired fields.
3. Click the **Save and Close** button to update the appointment in the schedule.

Deleting an Appointment

Selected appointments can be easily removed from your schedule.

1. Select the appointment you would like to remove from the schedule.
2. Click the **Delete** key on your keyboard. The appointment is removed from the schedule.

You can also delete an appointment by clicking the **Delete** button  within the **Appointment** dialog box.

Recurring Appointments

Appointments can be set to recur at specified intervals. An appointment can recur daily, weekly, monthly, or yearly.

1. Double-click the time of an appointment to add a new one, or double-click an existing appointment. The **Appointment** dialog box appears.
2. Click the **Recurrence** button. The **Appointment Recurrence** dialog box appears.

- Set the desired recurrence pattern:

When

The properties in the **When** group allow you to set the start time, end time, and duration of the appointment.

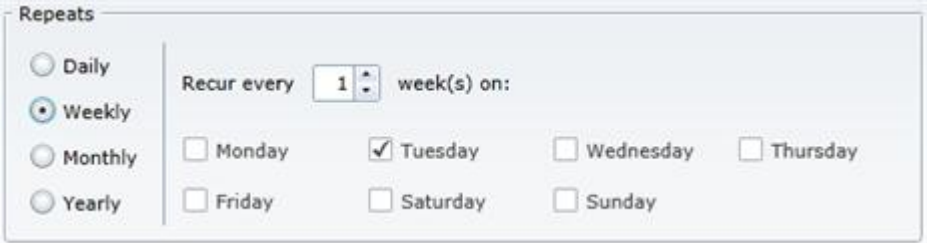
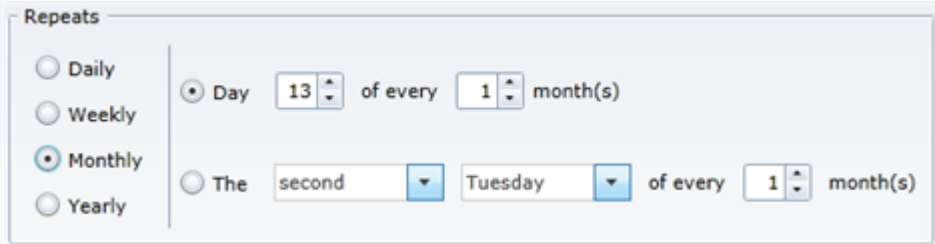
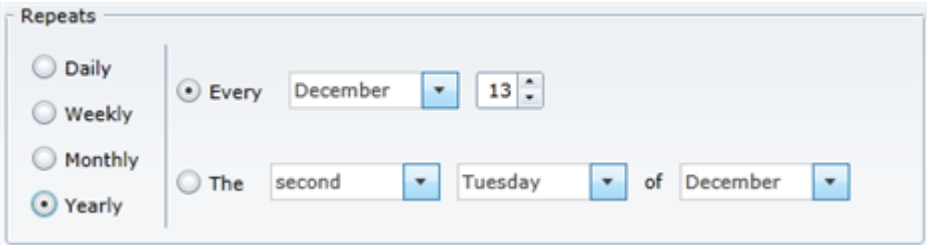
Repeats

The **Repeats** group settings change depending on whether the appointment recurs **Daily**, **Weekly**, **Monthly**, or **Yearly**.

Daily

The **Daily** settings allow you to repeat an appointment every specified number of days or only on working days.

For example, setting the appointment to every 2 day(s) will make the appointment appear every other day. Setting the appointment to on working days will make the appointment appear only Monday through Friday, by default.

<p>Weekly</p>	<p>The Weekly settings allow you to repeat the appointment on every specified week on specified days.</p>  <p>For example, setting the appointment to every 2 week(s) on and selecting Tuesday and Thursday will repeat the appointment every other week on Tuesdays and Thursdays.</p>
<p>Monthly</p>	<p>The Monthly settings allow you to repeat an appointment on every specified date at a specified interval of months or on a specified day and week of the month at a specified interval of months.</p>  <p>For example, setting the appointment to on the 8 day of every 2 month will make the appointment appear on the 8th of every other month. Setting the appointment to on the third Monday of every 2 month will make the appointment appear on the third Monday of every other month.</p>
<p>Yearly</p>	<p>The Yearly setting allows you to repeat an appointment on a specified date or a specified day and week of a specified month.</p>  <p>For example, setting the appointment to on the 2 day of January will make the appointment appear on January 2nd every year. This setting is ideal for birthdays and anniversaries.</p> <p>Setting the appointment to on the first Friday of January will make the appointment appear on the first Friday in January every year.</p>

Range

The **Range** group allows you to set a time span for the recurrence.

The screenshot shows a dialog box titled "Range". It contains three radio buttons for ending a recurrence: "No end date", "End after:", and "End by:". The "End after:" option is selected, with a numeric spinner set to "10" and the unit "occurrences". The "Start" dropdown is set to "Tuesday, December 13, 2011" and the "End by:" dropdown is set to "Monday, February 13, 2012".

The **Start** drop-down calendar allows you to select the date from which the recurrence will start. There are three options to choose from for an end date:

- **No end date** will make the appointment recur indefinitely.
 - **End after 0 occurrences** will make the appointment recur a specified number of times. For example, if an appointment repeated every day, setting **End after 25 occurrences** would allow the appointment to repeat every day 25 times.
 - **End by** will make the appointment recur until the date specified.
4. Click **Ok** to close the **Appointment Recurrence** dialog box.

Scheduler for LightSwitch Tutorial

In this tutorial, you will create a new LightSwitch project, add a primary data source that binds to a screen template to create the schedule UI, and create additional tables that will become contacts and resources that can be added to appointments in the schedule.

Step 1: Creating a LightSwitch Project


Begin by creating a LightSwitch project.


1. In Visual Studio, select **File | New | Project**.
2. Under **Installed Templates**, select **LightSwitch**. The .NET Framework 4 must be selected in order to create a LightSwitch application.
3. Choose **LightSwitch Application** for the preferred language, enter a name for the application, and click **OK**. Your LightSwitch project is created. You'll notice it contains the **Data Sources** and **Screens** folders.
4. In the Solution Explorer, right-click the project node and select **Properties**.
5. In the Properties window, select the **Extensions** tab and make sure the **Microsoft LightSwitch Extensions** and **ComponentOne Scheduler for LightSwitch** items are selected and have the **Use in new projects** fields selected.


Step 2: Adding Data Sources

In this step, you will create a primary appointments data source that will be bound to the calendar screen to create a fully functional schedule. You will also create two additional tables: one to keep track of the sales people, who will become the contacts list, and one to keep track of information for the sales regions, which will become the resources list. Users will be able to use these lists to add contacts and resources to appointments in the schedule.

1. In the Solution Explorer, right-click the **Data Sources** folder and select **Add Table**. Repeat this step to create three tables in all.
2. Set up each table as in the following examples:

Appointment			
Name	Type	Required	
 Id	Integer	<input checked="" type="checkbox"/>	
Subject	String	<input checked="" type="checkbox"/>	
StartTime	Date Time	<input checked="" type="checkbox"/>	
EndTime	Date Time	<input checked="" type="checkbox"/>	
Body	String	<input type="checkbox"/>	
Location	String	<input type="checkbox"/>	
Properties	String	<input type="checkbox"/>	
<Add Property>		<input type="checkbox"/>	

SalesPerson			
Name	Type	Required	
 Id	Integer	<input checked="" type="checkbox"/>	
Name	String	<input checked="" type="checkbox"/>	
PhoneNumber	Phone Number	<input type="checkbox"/>	
<Add Property>		<input type="checkbox"/>	

Resource			
Name	Type	Required	
 Id	Integer	<input checked="" type="checkbox"/>	
Name	String	<input checked="" type="checkbox"/>	
Color	String	<input type="checkbox"/>	
<Add Property>		<input type="checkbox"/>	

3. Select the **Appointment** table and click the **Properties** row. In the Visual Studio Properties window, delete **255** for the **MaximumLength** property. This will allow the control to maintain relationships between appointments, contacts, and resources.

In the next step, you will add a screen template to be associated with each of the tables. This is necessary to create the UI for the schedule and lists.

Step 3: Adding Screen Templates

Once you have the data sources, you can add a screen template for each. The **ComponentOne Calendar Screen** template will create the schedule for you, so you don't have to enter a single line code. It will be mapped to the **Appointments** table you created in step 2. You'll use the **List and Details Screen** template for the **SalesPerson** and **Resource** tables so users can edit the contacts and resources lists as needed.

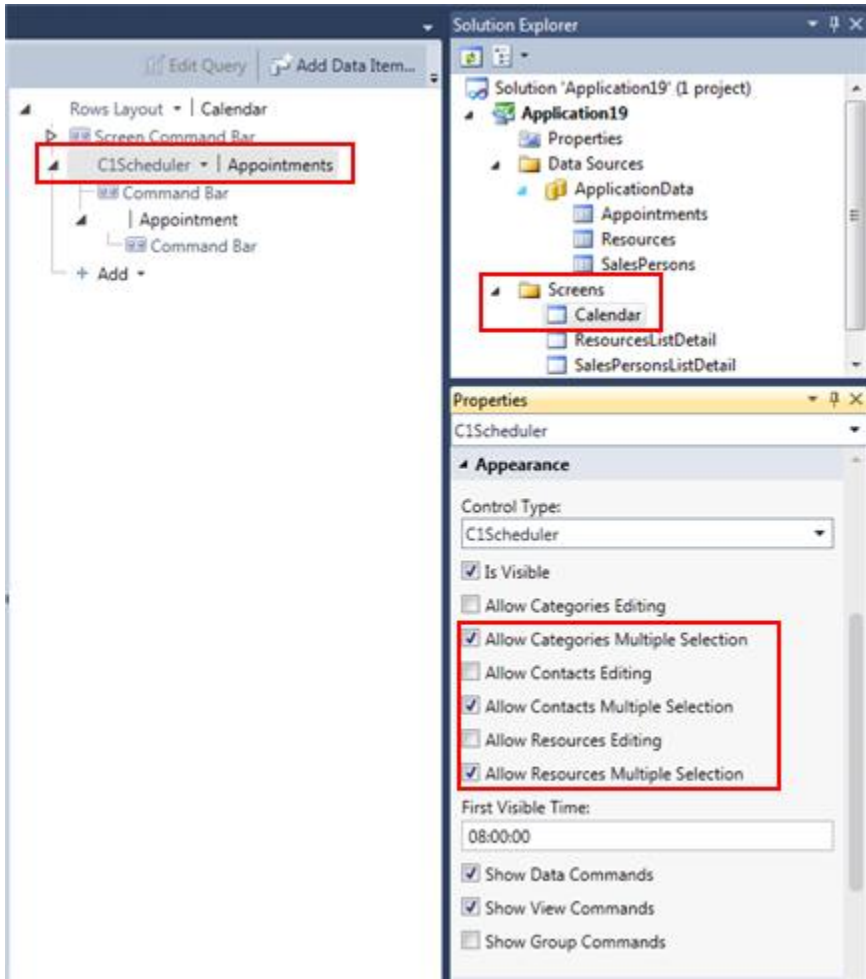
1. In the Solution Explorer, right-click the **Screens** folder and select **Add Screen**.
2. Select **ComponentOne Calendar Screen** in the list of screen templates.
3. Use the default name **Calendar** under **Screen Name**, select the **Appointments** data source from the **Screen Data** list, and click **OK**.
4. Repeat these three steps for the remaining two tables, only select the **List and Details Screen** template and use the **SalesPerson** and **Resource** tables for the **Screen Data**.

In the next step, you will map the primary appointments table to the **ComponentOne Calendar Screen** to create the schedule.

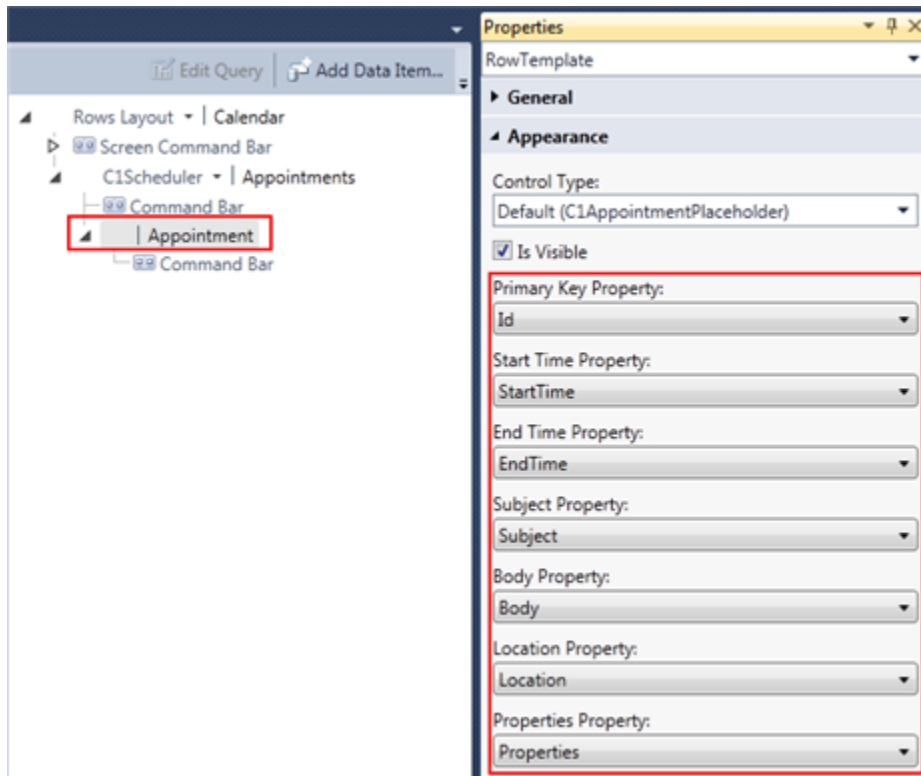
Step 4: Mapping a Screen to the Primary Data Source

In this step, you will bind the primary appointments table to the **ComponentOne Calendar Screen** in order for the schedule to appear in your application.

1. In the Solution Explorer, double-click the **Calendar** screen to open the designer and view the screen properties. If you select the **C1Scheduler** control under **Rows Layout**, you'll notice the default properties are set to allow multiple selections for contacts and resources. Keep these default settings.



2. Select the **Appointment** item, notice it is a **C1AppointmentPlaceholder** control, and set the properties as in the following image. These properties map to the properties you added in the **Appointment** table.

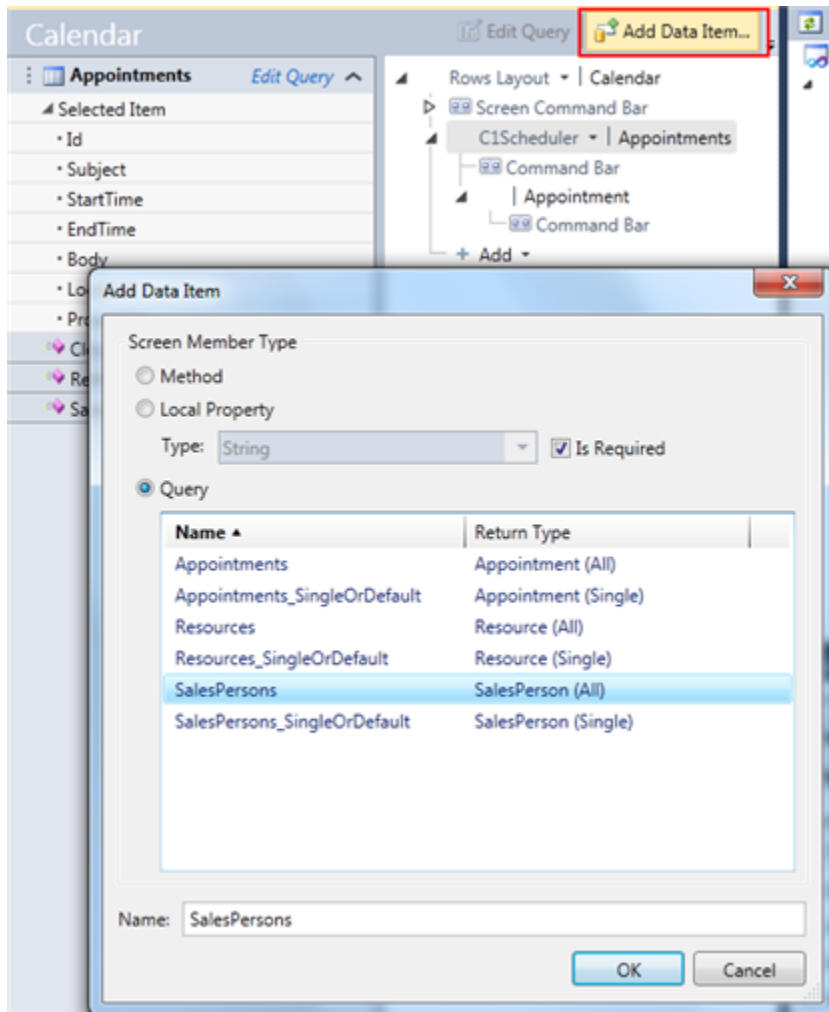


In the next step, you will add the remaining tables to the C1Scheduler control.

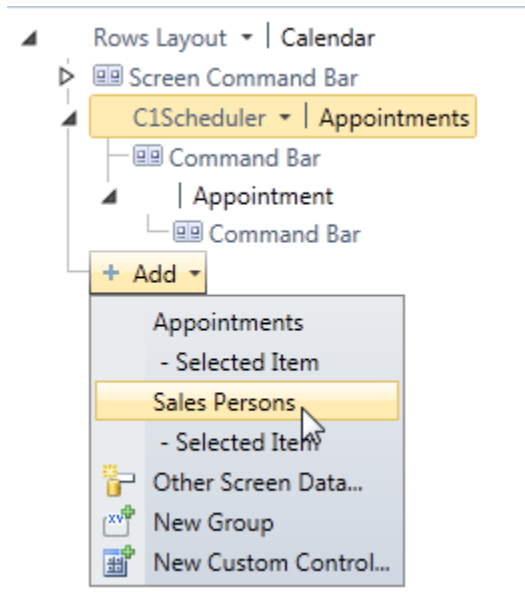
Step 5: Adding Contacts and Resources Data Sources

Now you can map the **SalesPerson** and **Resource** tables to the C1Scheduler control, which will allow users to add contacts and resources to their appointments.

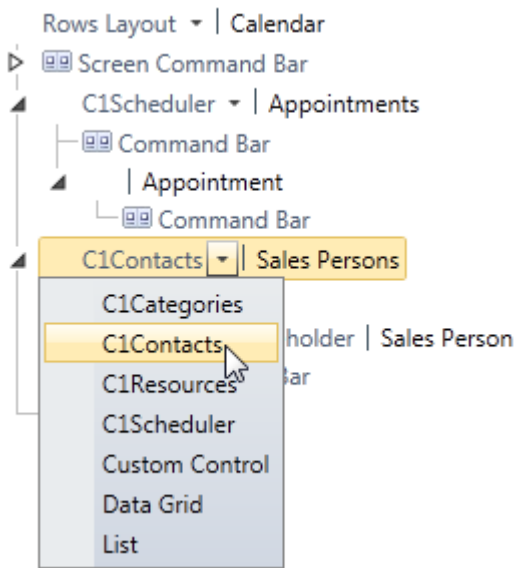
1. Click the **Add Data Item** button in the **Calendar** screen designer.
2. In the **Add Data Item** dialog box, select **Query** and choose *SalesPersons*, the **Return Type** *SalesPerson (All)* option, and click **OK**.



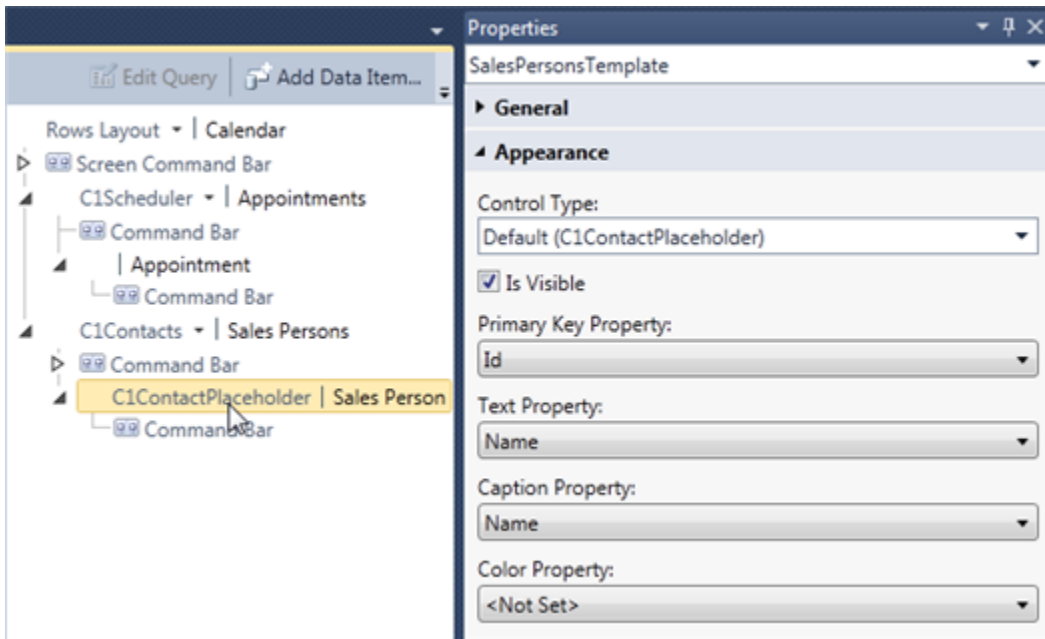
3. Under C1Scheduler, click **Add | Sales Persons**.



- By default, *Sales Persons* is added as a **Data Grid** control. Change it to a **C1Contacts** control.

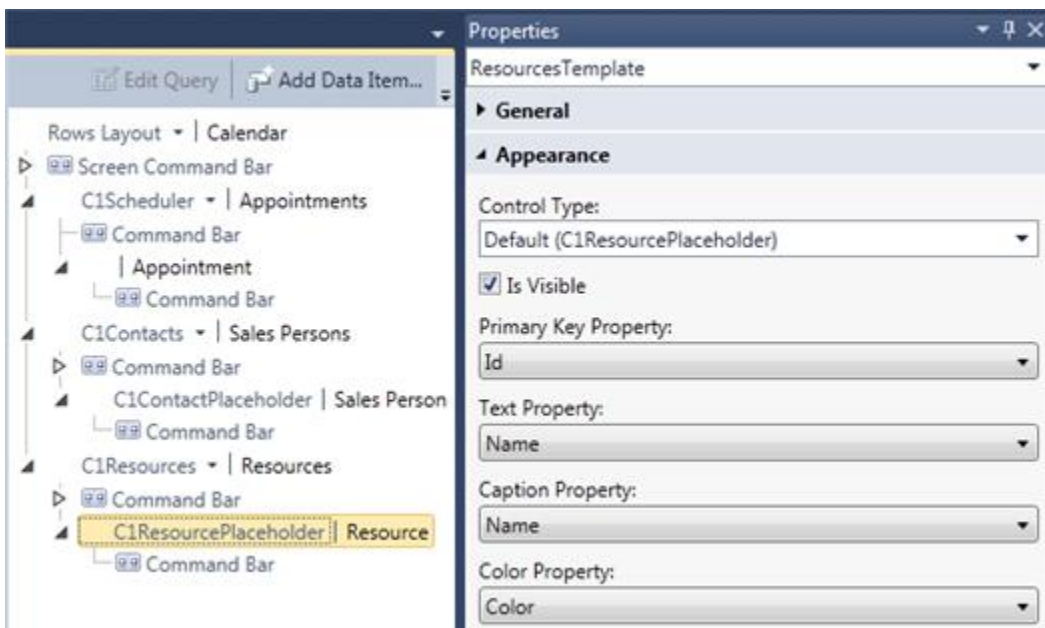


- Select the **C1ContactPlaceholder** control and set the properties as in the following image:



Note that leaving the **Color** property unset causes it to default to the **Text** setting. We do not need to set it for this example.

6. Repeat steps 1-5 of this topic to add *Resources* to the screen, only make it a **C1Resources** control.

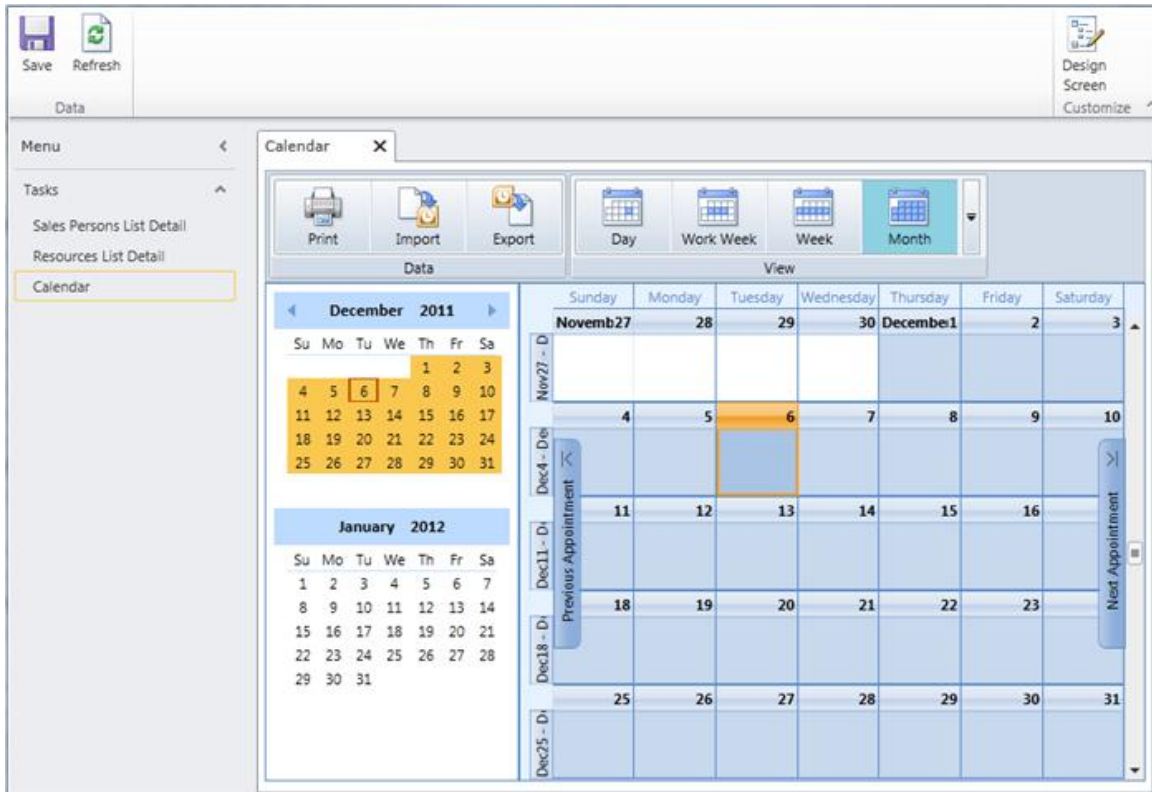


Now it's time to run the application and check out the schedule!

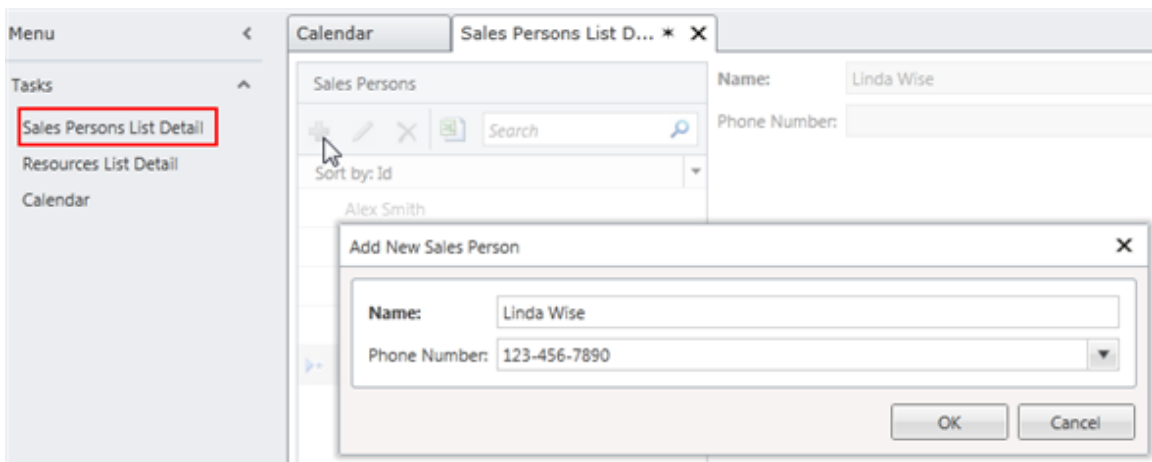
Step 6: Running the Application

When you run the application, a fully functional schedule will appear. Users can double-click dates and/or times to create appointments, add resources and contacts to the appointments, change the calendar views, and more.

1. Press **F5** to run the application. Notice you have a calendar, a *Sales Persons* list, and a *Resources* list.

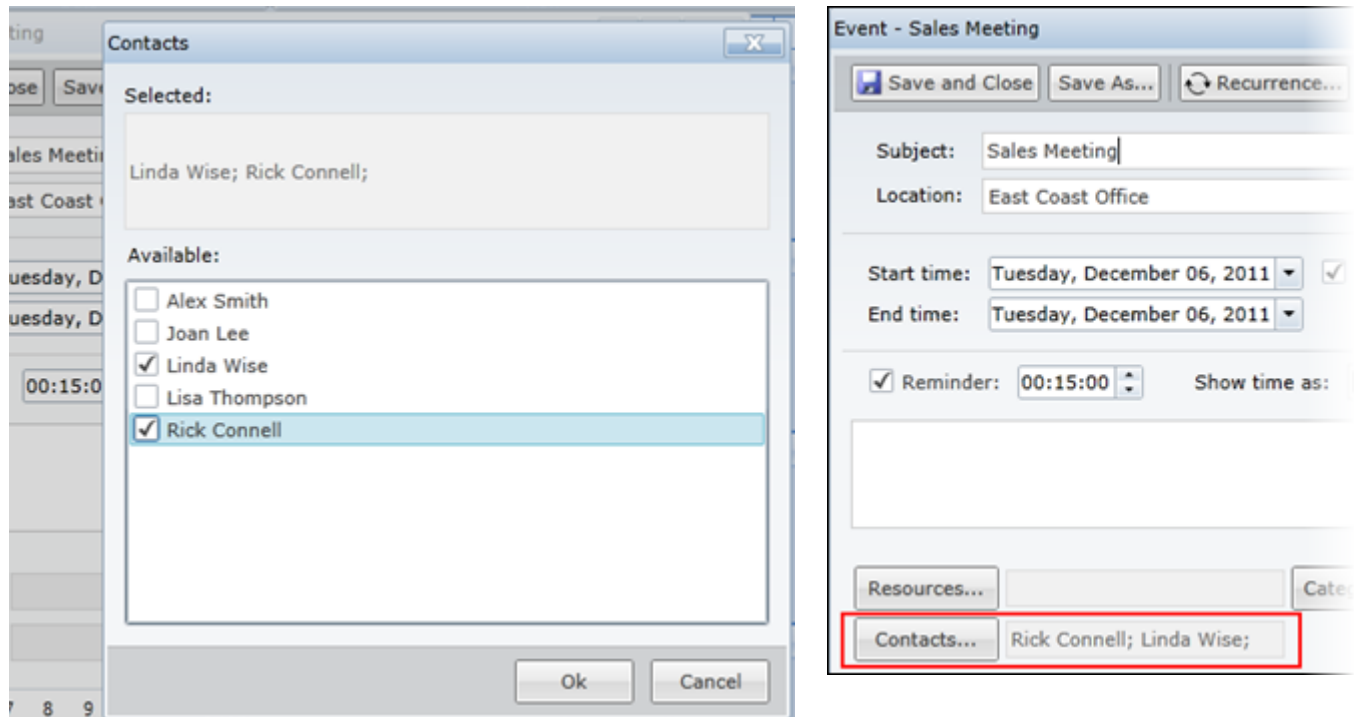


2. Under **Tasks**, double-click **Sales Persons List Detail** and use the **Add** button to add new sales people to the list. Click the **Save** button in the LightSwitch ribbon to save the new contacts.



You can add resources to the **Resources List Detail** in the same way.

3. Go back to the calendar and double-click a day or time to open the **Appointment** or **Event** dialog box. If the **Contacts** and **Resources** buttons are not appearing in the dialog box, click the **Refresh** button and open the appointment again.
4. Create an appointment and click the **Contacts** button. You can select the necessary contacts and click **Ok**. They will appear in the **Appointment** or **Event** dialog box.



Scheduler for LightSwitch Sample

To view the online demo for **ComponentOne Scheduler for LightSwitch**, visit the following URL:

<http://demo.componentone.com/LightSwitch/Scheduler>

To download the full C# source code for the online demo, including sample data, click this link:

<http://demo.componentone.com/LightSwitch/Scheduler/SchedulerLightSwitchDemo.zip>

Scheduler for LightSwitch Task-Based Help

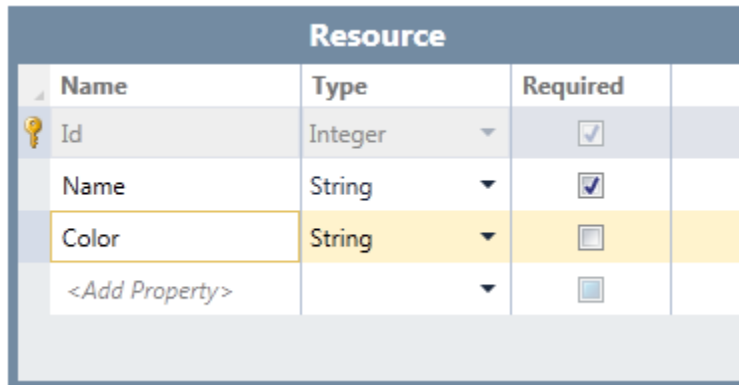
The topics in this section describe solutions for specific non-programming tasks using the **ComponentOne Scheduler for LightSwitch** product. By following the steps outlined in the help, you will be able to create and use projects demonstrating a variety of **Scheduler for LightSwitch** features.

Each task-based help topic assumes that you have created a LightSwitch project containing a ComponentOne Calendar Screen bound to a primary data source.

Adding Background Colors for Groups

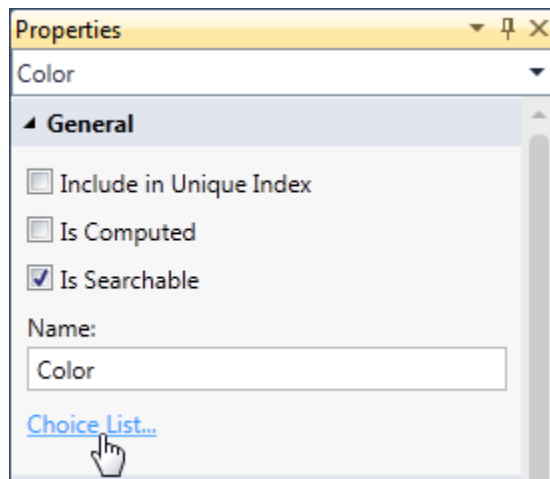
You can apply background colors to items from a data source when using the [Grouping](#) (page 19) feature. For example, suppose you want to color code sales regions in your resources list. Simply use the **Choice List** to determine available colors.

1. First, add a data source to the project as you did for the primary data source, only you must set three required properties instead of seven. They can be set as follows:

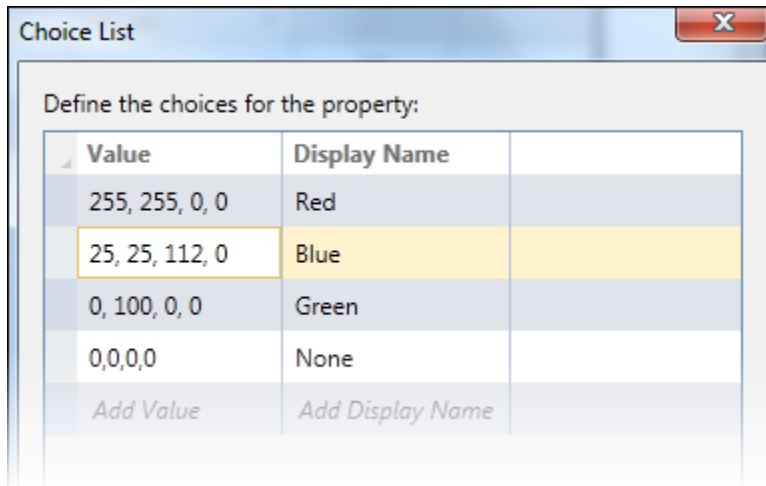


Name	Type	Required
Id	Integer	<input checked="" type="checkbox"/>
Name	String	<input checked="" type="checkbox"/>
Color	String	<input type="checkbox"/>
<Add Property>		<input type="checkbox"/>

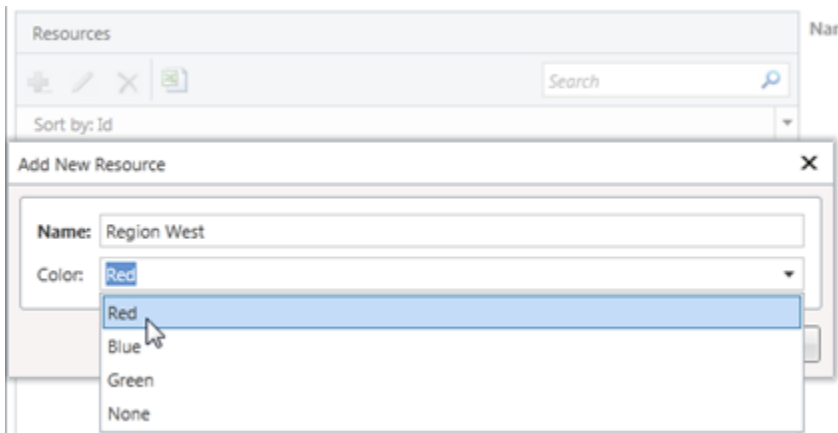
2. For the **Color** property, you can specify the colors you would like to make available by adding them to the **Choice List**.
 - a. Select the **Color** property in the table, and in the Visual Studio **Properties** window, click **Choice List**.



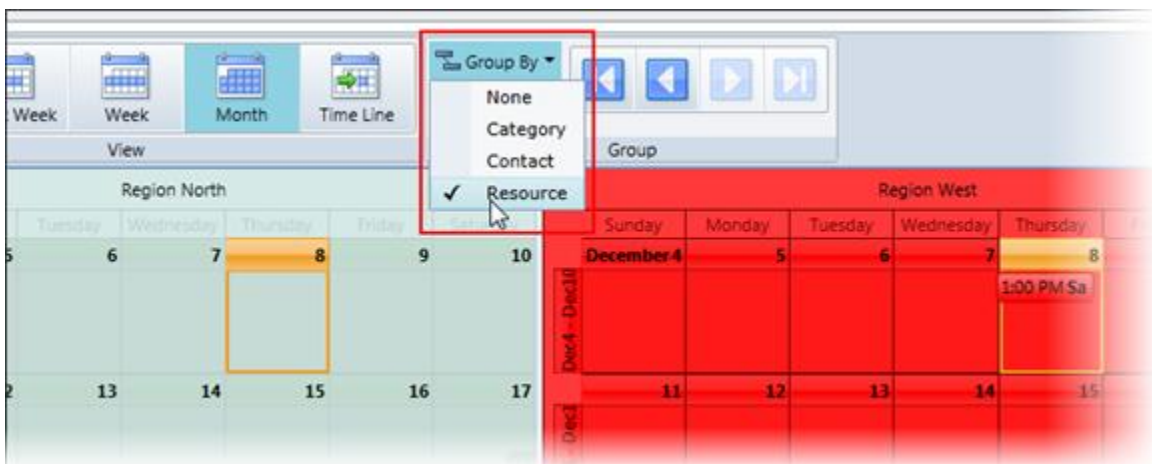
- b. Enter **Values** and **Display Names** as in the following image, for example, or add your own:



- When you run the project and add a new item to the data source, you can specify a color.



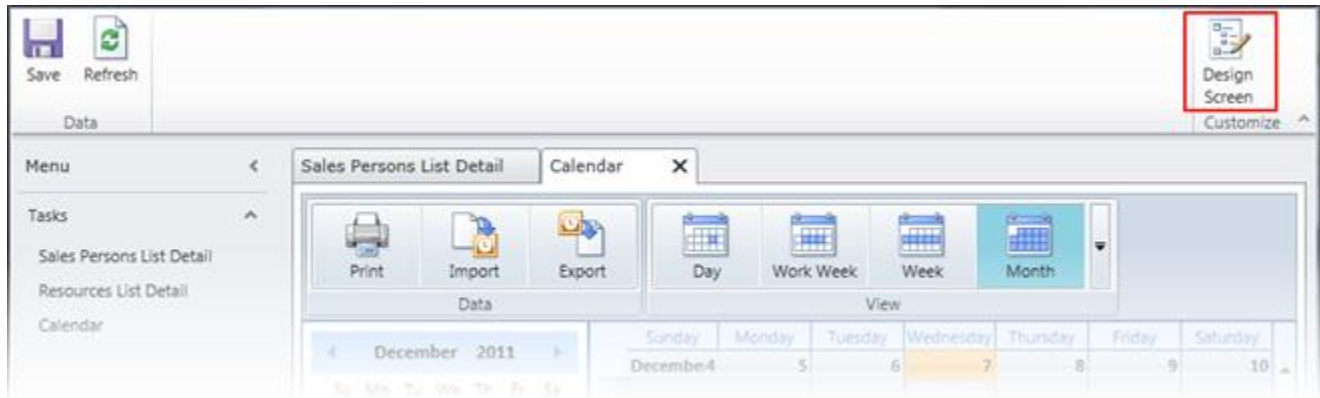
The color will be used as the background color for the item when grouping.



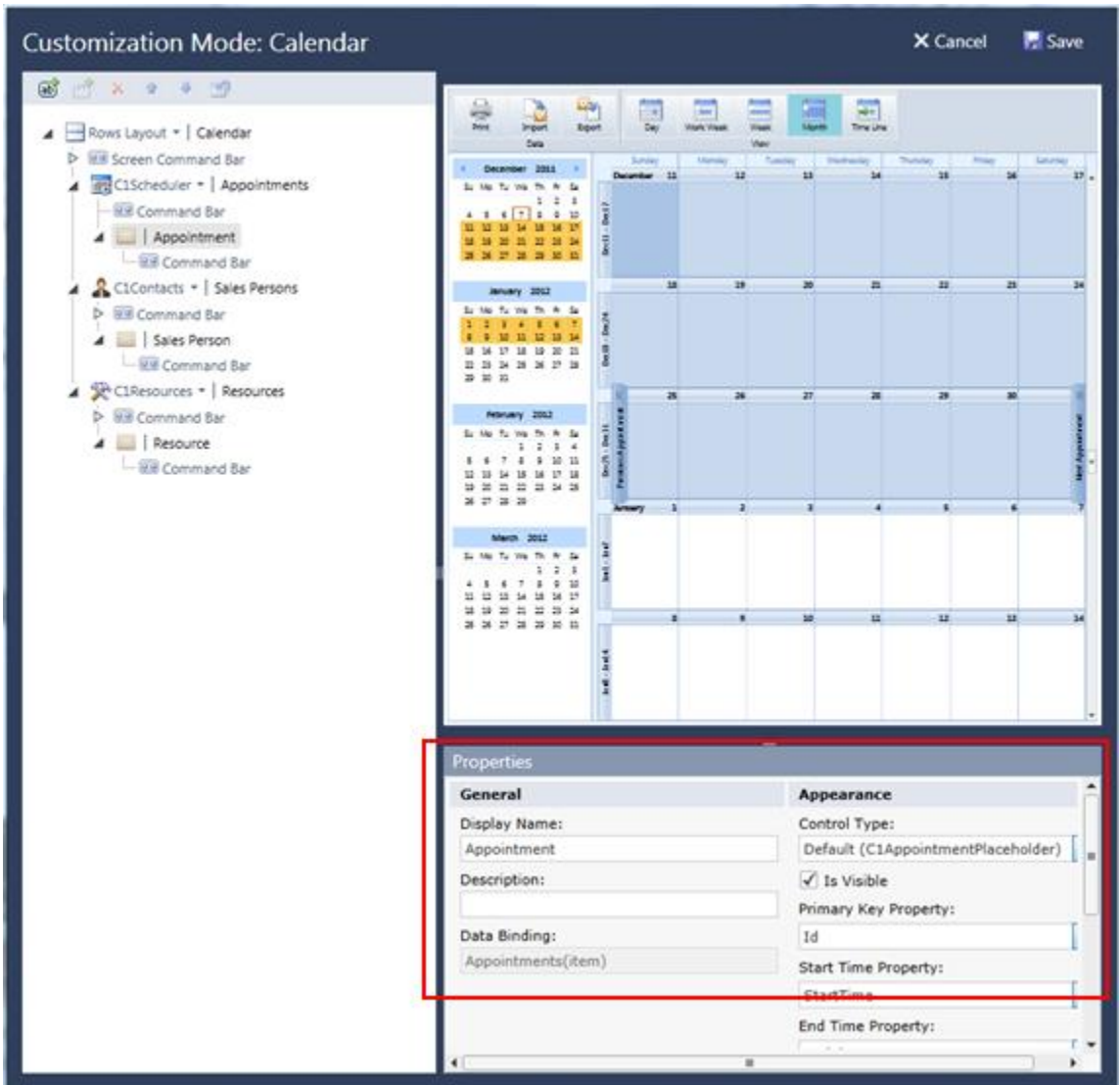
Customizing a Calendar

The schedule screen UI can be customized and saved to the project at run time. You can change the C1Scheduler properties and the table-to-screen mappings at run time, if necessary. You can still access the schedule and make appointments while in customization mode.

1. Click the **Design Screen** button in the upper-right corner of the application.



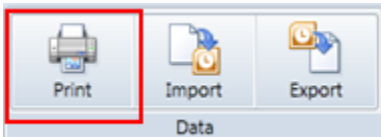
2. In the **Customization Mode** window, select one of the controls and change the necessary properties in the lower-right pane of the window.



Printing a Schedule

You can easily print the schedule(s) in your application.

1. Click the **Print** button in the **Data** toolbar group.

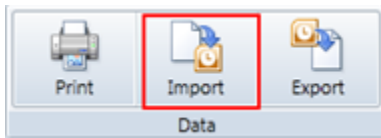


2. In the **Print** dialog box, set any necessary properties and click Print again. The schedule(s) will be printed, showing any appointments visible in the current view. Note that only what is on the screen, excluding the toolbar and calendars, will be printed.

Importing Data

Data can easily be imported from existing iCal or XML files into the schedule at run time. Note that data can only be imported from an XML file if the XML file was previously exported from C1Scheduler.

1. Click the **Import** button in the **Data** toolbar group.



2. In the **Open** dialog box, select the desired iCal **.ics** file and click **Open**. The schedule is updated.

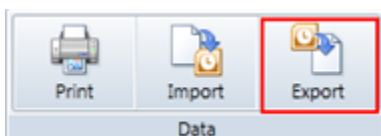


3. Click the **Save** button to save the changes.

Exporting Data

Just as easily as data can be imported from existing iCal and XML files, schedules can be saved and exported to iCal (*.ics) or XML (*.xml) files.

1. First, create a table, add a screen, and bind them in your project at design time.
2. Run the project and click the **Export** button in the **Data** toolbar group.



3. In the **Save As** dialog box, enter a name for the schedule in the **File name** text box and click **Save**. The schedule is saved.