

Applying Theme in WebUI Application

Introduction

One of the most challenging tasks in developing scalable web application is providing rich visual style design in consistent fashion across the entire web forms in the application. Designing the style that is reusable and consistent in an application can oftenly become a painful task for developers because of the insufficient tools that has specific features to address this problem.

Intersoft has implemented its own unique theme architecture since WebUI Framework 2 which enables a definition of xml-based layout file to be reusable and applied across entire web application to produce consistent visual styles.

This page describes how you can apply theme in WebUI application. In order to apply theme in WebUI application you will need to:

- Create Web Application
- Add Theme Project
- Add Theme File
- Add Layout File

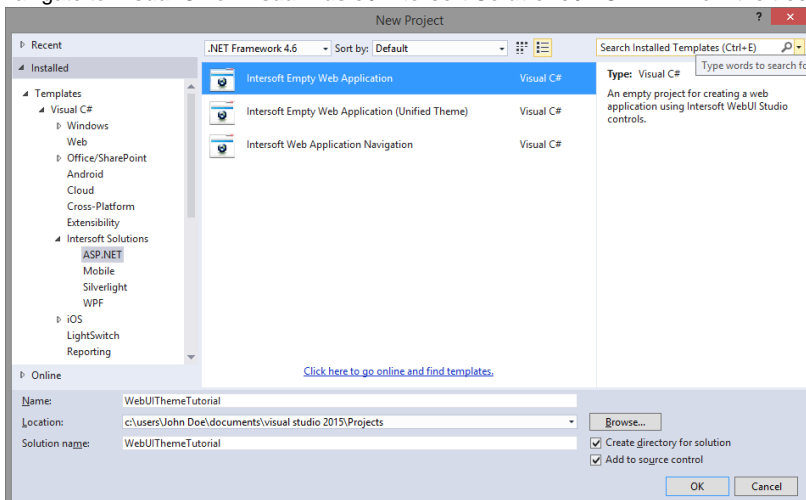
On this page:

- Introduction
- Create Web Application
- Add Theme Project
- Add Theme File
- Add Layout File
- Running WebUI Application with Theme Applied

Create Web Application

Intersoft has *Intersoft Empty Web Application* project template which helps developer to create an empty web application project using Intersoft WebUI Studio controls. Creating the project is easy and straight forward:

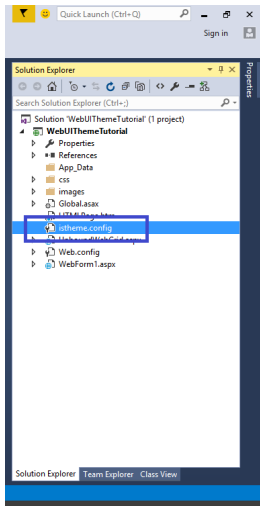
1. Open **Visual Studio**.
2. Open **New Project** dialog box (**File / New / Project** or type **New Project** in the **Quick Launch** window).
3. Navigate to **Visual C#** or **Visual Basic / Intersoft Solutions / ASP.NET** from the tree navigation on the left.



4. Enter **WebUIThemeTutorial** as the **Name** and define the **Location** of the project then click **OK** button.

Add Theme Project

The first thing to apply theme in WebUI application is to add theme project config file in the root of your web application.



The theme project configuration file represents a single file (ISTHEME.CONFIG) that contains configurations for all the theme project.

istheme.config

```
<?xml version="1.0" encoding="utf-8"?>
<IstThemeProject>
  <ProjectInfo AppName="WebUIThemeTutorial" WebPath="http://localhost:2392/"
PhysicalPath="C:\Users\John Doe\Documents\Visual Studio
2015\Projects\WebUIThemeTutorial" ApplyBehaviors="true" />
  <SelectedTheme Name="WinVista" Location="Private" Enabled="true" />
  <ThemeLocations>
    <ThemeLocation Name="Global" Path="/CommonLibrary/Themes" />
    <ThemeLocation Name="Private" Path="~/Themes" />
    <ThemeLocation Name="Custom" Path="C:\MyCustomDirectory" />
  </ThemeLocations>
  <CssOptimization Enabled="true" OptimizeName="true" GroupStyles="false" />
</IstThemeProject>
```

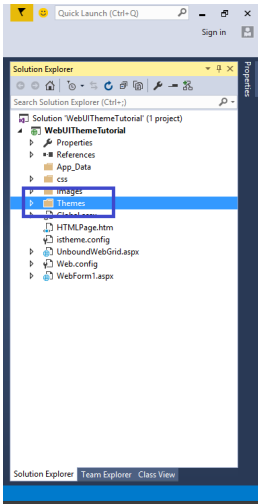
In the config file above, you'll see several nodes. Let's go through these nodes one by one.

- **ProjectInfo:** this node contains information about the theme project.
 - AppName:* the name of the theme project.
 - WebPath:* the URL for the hosted project in IIS.
 - PhysicalPath:* the physical path of the project.
 - ApplyBehaviors:* indicates whether ?? user behaviors should be applied?
- **SelectedTheme:** this node contains information about the selected theme
 - Name:* the name of the selected theme.
 - Location:* the location of the selected theme. This should correspond to one of specified ThemeLocation.
 - Enabled:* specify whether selected theme is enabled or not.
- **ThemeLocation:** this node contains information about theme location.
 - Name:* the name of theme location.
 - Path:* the path of theme location.

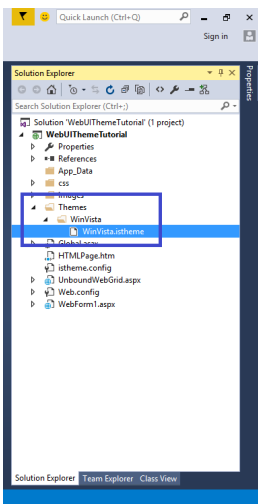
This theme project configuration specify that WebUIThemeTutorial project uses WinVista theme in Private location. In the next step, we will add theme file in a location which correspond to the Location attribute in SelectedTheme node.

Add Theme File

Add a folder and named it as **Themes** in the root of your web application. This folder name should match with the one specified in Location attribute in SelectedTheme node at Theme project config file.



Next, add a theme file into the folder. The theme file represents a single file (.istheme extension) that contains configurations for all the components, pages and/or controls that are contained within the Web application.



The following is an example of theme project definition.

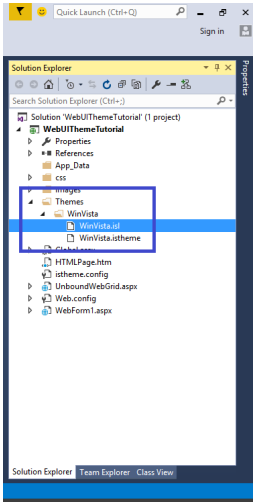
winvista.istheme

```
<?xml version="1.0" encoding="utf-8"?>
<ISTheme>
  <ThemeGroup Name="Default" IsDefault="true">
    <ISComponents>
      <Component Type="ISNet.WebUI.WebDesktop.WebDesktopManager"
        Assembly="ISNet.WebUI.WebDesktop" LayoutName="Vista" DataFile="WinVista.isl" />
      <Component Type="ISNet.WebUI.WebGrid.WebGrid" Assembly="ISNet.WebUI.WebGrid"
        LayoutName="NewStyle" DataFile="DefaultSample.isl" />
    </ISComponents>
  </ThemeGroup>
</ISTheme>
```

In this sample, the theme file only contain configuration for WebDesktopManager and WebGrid components. The WebDesktopManager component will use Vista layout. Its style is specified in WinVista.isl (layout file).

Add Layout File

The layout file represents a single file (*.ISL) that contains style configurations. You can create a new layout file or use an existing layout file. To simplify the process, this tutorial will use an existing layout file which is available in the WebDesktop sample project.



Following is the layout file definition for the WebDesktop component.

```
winvista.isl > Expand
```

```
<ISWebDesktop:WebDesktopManager runat="server">
  <LoaderStyle BackColor="Gray" ForeColor="White" Font-Names="Tahoma"
Font-Size="9pt"
    BackgroundImage="/WebImages/WebUILogo.gif"
    CustomRules="background-repeat: no-repeat; background-position-x:
Right; background-position-y: Bottom">
  </LoaderStyle>
  <LoaderProgressStyle BackColor="WhiteSmoke" ForeColor="navy" BorderColor="White"
    BorderStyle="solid" BorderWidth="1px"
Width="200px"></LoaderProgressStyle>
  <ShortcutStyle>
    <Active ForeColor="White" BaseStyle="Normal" BackColor="Navy"></Active>
    <Normal Font-Size="8pt" Font-Names="Tahoma" Overflow="Visible" Cursor="Default"
    OverflowX="Visible" OverflowY="Visible"></Normal>
  </ShortcutStyle>
  <MenuStyles>
    <System HasBackgroundStrip="False">
      <ItemStyle>
        <Over ForeColor="White" BaseStyle="Normal" BackColor="Highlight"></Over>
        <Normal Font-Size="8pt" Font-Names="Tahoma" Overflow="Visible"
OverflowX="Visible" OverflowY="Visible"></Normal>
      </ItemStyle>
      <SeparatorStyle>
        <BorderSettings>
          <Top Color="Gray" Width="1px" Style="Solid"></Top>
        </BorderSettings>
```

```

    </SeparatorStyle>
    <FrameStyle BorderStyle="Solid" BorderWidth="1px" BorderColor="#404040"
BackColor="White"></FrameStyle>
    <DisabledItemStyle>
        <Over BaseStyle="Normal" BackColor="#E0E0E0"></Over>
        <Normal ForeColor="Silver" Font-Size="8pt" Font-Names="Tahoma"></Normal>
    </DisabledItemStyle>
</System>
</MenuStyles>
<WindowSettings CommandButtonBorderType="ComplexImages" BorderType="ComplexImages"
CaptionButtonSpacing="0">
    <CaptionStyle>
        <Normal Cursor="Default" Font-Bold="True" Font-Names="Tahoma" Font-Size="10pt"
ForeColor="Gainsboro">
            <Padding Bottom="2px" Left="2px" Right="2px" Top="2px" />
            <Margin Bottom="0px" Left="0px" Right="0px" Top="3px" />
        </Normal>
        <Active BaseStyle="Normal" ForeColor="White">
        </Active>
    </CaptionStyle>
    <CaptionButtonStyle>
        <Normal Overflow="Hidden" OverflowX="Hidden" OverflowY="Hidden"
CustomRules="position:relative; top:-2px">
        </Normal>
    </CaptionButtonStyle>
    <WindowStyle>
        <Normal Font-Names="Tahoma" Font-Size="8pt" BackColor="White"
BorderColor="WhiteSmoke"
            BorderStyle="Ridge" BorderWidth="3px" Height="100%" Width="100%">
        <BorderSettings>
            <Top Style="none" />
        </BorderSettings>
        <Padding Bottom="4px" Left="4px" Right="4px" Top="4px" />
    </Normal>
        <Active BaseStyle="Normal" BorderColor="DimGray">
        <BorderSettings>
            <Top Style="none" />
            <Left Style="ridge" />
            <Right Style="ridge" />
        </BorderSettings>
    </Active>
    </WindowStyle>
    <ContainerStyle BackColor="White" Font-Names="Tahoma" Font-Size="8pt"
Height="100%"
        Width="100%" Overflow="Auto" OverflowX="Auto" OverflowY="Auto">
        <Padding Bottom="4px" Left="4px" Right="4px" Top="4px" />
    </ContainerStyle>
    <CommandButtonDisabledStyle BackColor="Control" BorderColor="ControlDarkDark"
BorderStyle="Solid"
        BorderWidth="1px" Font-Names="Tahoma" Font-Size="8pt" ForeColor="Gray"
Overflow="Visible"
        OverflowX="Visible" OverflowY="Visible">
    </CommandButtonDisabledStyle>
    <CommandButtonStyle>
        <Active BaseStyle="Normal" ForeColor="White">
        </Active>
        <Over BaseStyle="Normal">
        </Over>
        <Normal BorderStyle="None" Font-Names="Tahoma" Font-Size="8pt"

```

```

Overflow="Visible"
    OverflowX="Visible" OverflowY="Visible">
    </Normal>
</CommandButtonStyle>
</WindowSettings>
<TaskBarButtonStyle>
    <Normal Cursor="Default" BorderColor="#666575" BorderStyle="Ridge"
Font-Names="Tahoma"
    Font-Size="8pt" BorderWidth="1px" Width="150px" ForeColor="White"
BackgroundImage="/CommonLibrary/Images/WebDesktop/Vista/V1TBBtnNormal.gif">
    <BorderSettings>
    <Top Style="solid" />
    </BorderSettings>
</Normal>
    <Active BaseStyle="Normal" BorderColor="#404040" GradientType="Vertical"
BackgroundImage="/CommonLibrary/Images/WebDesktop/Vista/V1TBBtnActive.gif">
    </Active>
    <Over BaseStyle="Normal" BorderColor="#2C5FB2"
BackgroundImage="/CommonLibrary/Images/WebDesktop/Vista/V1TBBtnOver.gif">
    </Over>
</TaskBarButtonStyle>
<FrameStyle
BackgroundImage="url(/CommonLibrary/Images/WebDesktop/WebDesktopWall1.jpg)"
BackColor="WhiteSmoke" Overflow="Visible" OverflowX="Visible" OverflowY="Visible">
</FrameStyle>
    <TaskBarStyle Font-Names="Tahoma" Font-Size="8pt" Height="30px" Overflow="Hidden"
    OverflowX="Hidden" OverflowY="Hidden"
BackgroundImage="/CommonLibrary/Images/WebDesktop/Vista/V1TaskBarBk.gif">
</TaskBarStyle>
    <ImagesSettings CaptionCenterActive="Vista/V1CenterActive.gif"
CaptionCenterInactive="Vista/V1CenterInactive.gif"
    CaptionLeftActive="Vista/V1LeftActive.gif"
CaptionLeftInactive="Vista/V1LeftInactive.gif"
    CaptionRightActive="Vista/V1RightActive.gif"
CaptionRightInactive="Vista/V1RightInactive.gif"
    CloseActive="Vista/V1CloseActive.gif"
CloseInactive="Vista/V1CloseInactive.gif" CloseOver="Vista/V1CloseOverActive.gif"
    MaximizeActive="Vista/V1Maxactive.gif"
MaximizeInactive="Vista/V1MaxInactive.gif" MaximizeOver="Vista/V1MaxOverActive.gif"
    MinimizeActive="Vista/V1MinActive.gif"
MinimizeInactive="Vista/V1MinInactive.gif" MinimizeOver="Vista/V1MinOverActive.gif"
    RestoreActive="Vista/V1RestoreActive.gif"
RestoreInactive="Vista/V1RestoreInactive.gif"
RestoreOver="Vista/V1RestoreOverActive.gif"
    CloseDown="Vista/V1CloseDown.gif"
MaximizeDown="Vista/V1MaxDown.gif" MinimizeDown="Vista/V1MinDown.gif"
    RestoreDown="Vista/V1RestoreDown.gif"
ButtonCenterActive="ISBtnCenterActive.gif"
ButtonCenterInactive="ISBtnCenterInactive.gif"
    ButtonCenterOver="ISBtnCenter.gif"
ButtonLeftActive="ISBtnLeftActive.gif" ButtonLeftInactive="ISBtnLeftInActive.gif"
    ButtonLeftOver="ISBtnLeft.gif"
ButtonRightActive="ISBtnRightActive.gif"
ButtonRightInactive="ISBtnRightInactive.gif"
    ButtonRightOver="ISBtnRight.gif" />

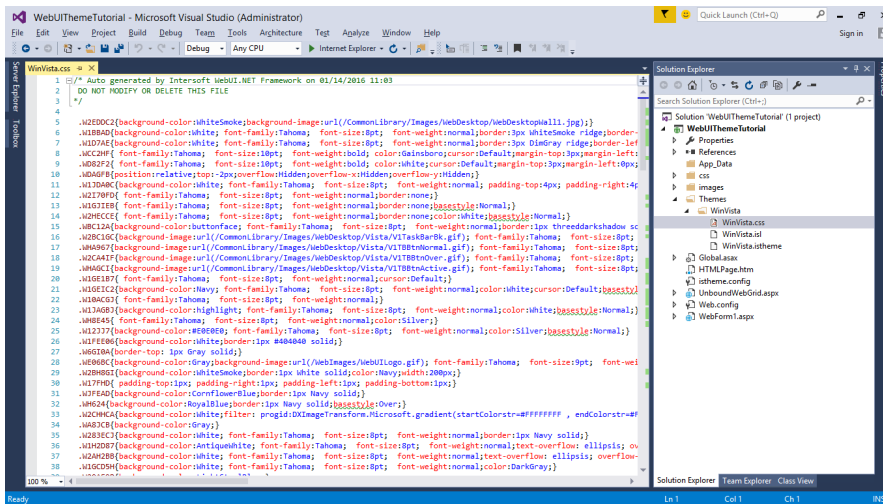
```

```
</ISWebDesktop:WebDesktopManager>
```

Running WebUI Application with Theme Applied

Save all the changes and build your web application. When the application is running and requested through browser, WebUI Framework (through Theme architecture) will detect for istheme.config file and automatically apply the contained theme information and component's style definition to the requested page.

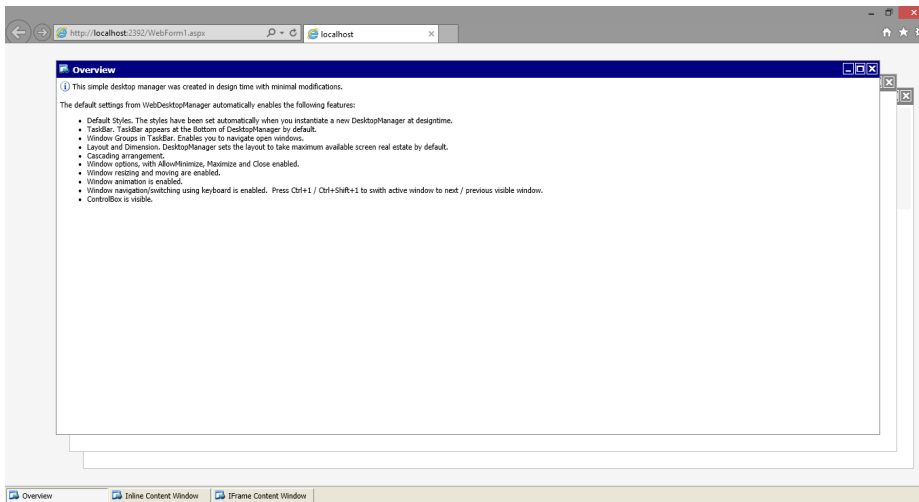
Theme framework will automatically generate css file at first run. It can be found inside the theme folder.



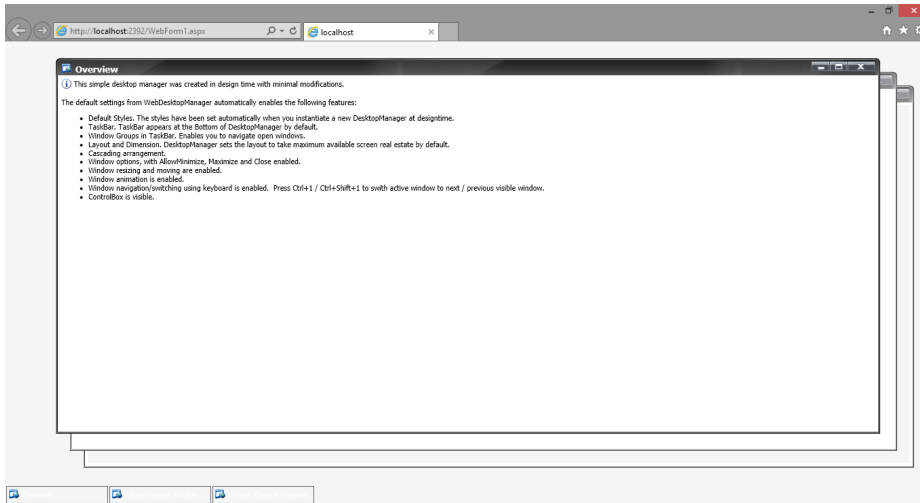
The screenshot shows the Visual Studio IDE with a CSS file open. The code defines various classes for a desktop theme, including background colors, fonts, and borders. The classes are prefixed with 'W' and 'I' (e.g., WZEDDC, WJBBAB, WJDD7A). The code is as follows:

```
1  /* Auto generated by Intersoft WebUI.NET Framework on 03/14/2016 11:03
2  DO NOT MODIFY OR DELETE THIS FILE
3  */
4
5  .WZEDDC{background-color:whiteSmoke;background-image:url(/CommonLibrary/Images/WebDesktop/WebDesktopWall1.jpg);}
6  .WJBBAB{background-color:white; font-family:Tahoma; font-size:8pt; font-weight:normal;border:3px whiteSmoke ridge;border-
7  .WJDD7A{background-color:white; font-family:Tahoma; font-size:8pt; font-weight:normal;border:3px DiadGray ridge;border-lef
8  .WKZCH{ font-family:Tahoma; font-size:18pt; font-weight:bold; color:Gainsboro;cursor:Default;margin-top:3px;margin-left:
9  .WJBDZF{ font-family:Tahoma; font-size:8pt; font-weight:bold; color:white;cursor:Default;margin-top:3px;margin-left:9px;
10 .WJDDPF{position:relative;top:-2px;overflow:Hidden;overflow-x:Hidden;overflow-y:Hidden;}
11 .WJDDAR{background-color:white; font-family:Tahoma; font-size:8pt; font-weight:normal; padding-top:4px; padding-right:4;
12 .WJDFWQ{ font-family:Tahoma; font-size:8pt; font-weight:normal;border:none;}
13 .WJDIIE{ font-family:Tahoma; font-size:8pt; font-weight:normal;border:none;background-color:white;}
14 .WJDECC{ font-family:Tahoma; font-size:8pt; font-weight:normal;border:none;color:white;background-color:white;}
15 .WJICJA{background-color:blue; font-family:Tahoma; font-size:8pt; font-weight:normal;border:1px threeDdarkshadow sc
16 .WJCIK{background-image:url(/CommonLibrary/Images/WebDesktop/Vista/VITaskBarBk.gif); font-family:Tahoma; font-size:8pt;
17 .WJAG9{background-image:url(/CommonLibrary/Images/WebDesktop/Vista/VITBTHNormal.gif); font-family:Tahoma; font-size:8pt;
18 .WJCA4{background-image:url(/CommonLibrary/Images/WebDesktop/Vista/VITBTHover.gif); font-family:Tahoma; font-size:8pt;
19 .WJMGCT{background-image:url(/CommonLibrary/Images/WebDesktop/Vista/VITBTHActive.gif); font-family:Tahoma; font-size:8pt;
20 .WJIEI{ font-family:Tahoma; font-size:8pt; font-weight:normal;cursor:Default;}
21 .WJGEIC{background-color:gray; font-family:Tahoma; font-size:8pt; font-weight:normal;color:white;cursor:Default;background
22 .WJBAQ{ font-family:Tahoma; font-size:8pt; font-weight:normal;}
23 .WJAGS{background-color:yellow; font-family:Tahoma; font-size:8pt; font-weight:normal;color:white;background-color:yellow;}
24 .WJBE4{ font-family:Tahoma; font-size:8pt; font-weight:normal;color:silver;}
25 .WJZJ7{background-color:#E8E8E8; font-family:Tahoma; font-size:8pt; font-weight:normal;}
26 .WJFE8{background-color:white;border:1px #404040 solid;}
27 .WJGIM{border-top: 1px Gray solid;}
28 .WJBBK{background-color:gray;background-image:url(/WebImages/WebUILogo.gif); font-family:Tahoma; font-size:8pt; font-wel
29 .WJNBS{background-color:whiteSmoke;border:1px white solid;color:navy;width:200px;}
30 .WJ7FD{ padding-top:1px; padding-right:1px; padding-left:1px; padding-bottom:1px;}
31 .WJFEAD{background-color:cornflowerblue;border:1px navy solid;}
32 .WJN24{background-color:royalblue;border:1px navy solid;background-color:royalblue;}
33 .WJCHCA{background-color:white;filter: progid:DXImageTransform.Microsoft.gradient(startColorstr=#FFFFFF , endColorstr=#
34 .WJBCB{background-color:gray;}
35 .WJBCIC{background-color:white; font-family:Tahoma; font-size:8pt; font-weight:normal;border:1px navy solid;}
36 .WJHDB{background-color:AntiqueWhite; font-family:Tahoma; font-size:8pt; font-weight:normal;text-overflow: ellipsis; ov
37 .WJAH2B{background-color:white; font-family:Tahoma; font-size:8pt; font-weight:normal;text-overflow: ellipsis; overfl
38 .WJGCO{background-color:white; font-family:Tahoma; font-size:8pt; font-weight:normal;color:DarkGray;}
39 .WJGCO{background-color:white; font-family:Tahoma; font-size:8pt; font-weight:normal;color:DarkGray;}
```

The screenshot below shows a simple page with WebDesktopManager before WebUI theme applied.



The result of WebDesktop Manager with Vista theme will look like following:



Related Topics

- [New WebUI Modern Theme](#)
- [Unified Theming](#)
- [Theme Architecture](#)