Contents

You can use a simple user control for a "real time" display of trace messages in your Silverlight application.

- **Platform:** Silverlight
- **Language:** C#, VB
- **Download:** Silverlight trace viewer

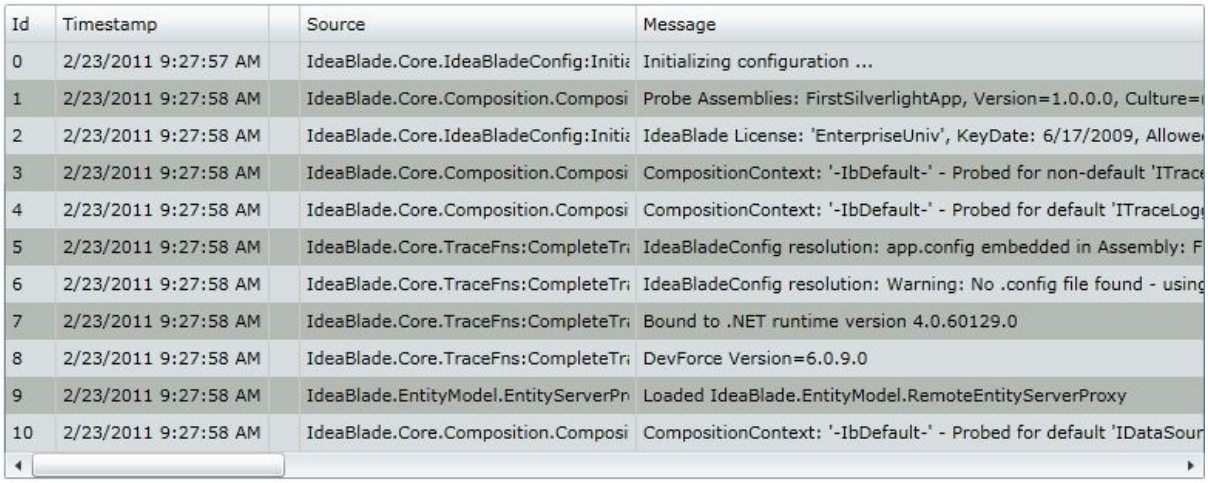
Problem

A debug log is not generated for a Silverlight client application but you'd like to capture the trace messages to help diagnose problems.

Solution

You can still capture the tracing and debugging messages your application generates. This sample shows a simple trace viewer user control which displays these messages in a grid.

Here's what the viewer looks like when "dropped" into an existing window - a simple real-time display of tracing and debugging messages generated on the client. Note that messages from the server will not be shown by this viewer.



Id	Timestamp	Source	Message
0	2/23/2011 9:27:57 AM	IdeaBlade.Core.IdeaBladeConfig:Initia	Initializing configuration ...
1	2/23/2011 9:27:58 AM	IdeaBlade.Core.Composition.Composi	Probe Assemblies: FirstSilverlightApp, Version=1.0.0.0, Culture=
2	2/23/2011 9:27:58 AM	IdeaBlade.Core.IdeaBladeConfig:Initia	IdeaBlade License: 'EnterpriseUniv', KeyDate: 6/17/2009, Allowe
3	2/23/2011 9:27:58 AM	IdeaBlade.Core.Composition.Composi	CompositionContext: '-IbDefault-' - Probed for non-default 'ITrace
4	2/23/2011 9:27:58 AM	IdeaBlade.Core.Composition.Composi	CompositionContext: '-IbDefault-' - Probed for default 'ITraceLog
5	2/23/2011 9:27:58 AM	IdeaBlade.Core.TraceFns:CompleteTra	IdeaBladeConfig resolution: app.config embedded in Assembly: F
6	2/23/2011 9:27:58 AM	IdeaBlade.Core.TraceFns:CompleteTra	IdeaBladeConfig resolution: Warning: No .config file found - using
7	2/23/2011 9:27:58 AM	IdeaBlade.Core.TraceFns:CompleteTra	Bound to .NET runtime version 4.0.60129.0
8	2/23/2011 9:27:58 AM	IdeaBlade.Core.TraceFns:CompleteTra	DevForce Version=6.0.9.0
9	2/23/2011 9:27:58 AM	IdeaBlade.EntityModel.EntityServerPr	Loaded IdeaBlade.EntityModel.RemoteEntityServerProxy
10	2/23/2011 9:27:58 AM	IdeaBlade.Core.Composition.Composi	CompositionContext: '-IbDefault-' - Probed for default 'IDataSour

Here's the XAML for the control...

```
XA  <UserControl x:Class="IdeaBlade.Samples.TraceWindow"
      xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
      xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
      xmlns:data="clr-namespace:System.Windows.Controls;assembly=System.Windows.Controls.Data"
      Width="Auto" Height="Auto">
      <Grid x:Name="LayoutRoot" Margin="20,20,20,20" >
        <data:DataGrid x:Name="_dataGrid"
          HorizontalAlignment="Left"
          VerticalAlignment="Top"
          AutoGenerateColumns="True"
          MinWidth="250"
          MinHeight="100"
          Background="#FFB5BAB5"
          Margin="0,0,20,0"
          IsReadOnly="True"
          />
      </Grid>
    </UserControl>
```

...and the code behind:

```
using System;
```

```
using System.Collections.ObjectModel;
using System.Windows.Controls;
using IdeaBlade.Core;
namespace IdeaBlade.Samples {
 /// <summary>
 /// Sample trace subscriber.  You can drop the TraceViewer UserControl onto a page
 /// to display tracing information from the Silverlight application in a grid.
 /// </summary>
 /// <remarks>
 /// To use the TraceSubscriber: 1) listen for its Publish event,
 /// and 2) call StartSubscription() to have tracing messages sent to you.
 /// You can also call StopSubscription() to temporarily or permanently stop receiving messages.
 /// </remarks>
 public partial class TraceWindow : UserControl {
  public TraceWindow() {
    InitializeComponent();
    _messages = new ObservableCollection<TraceMessage>();
    _subscriber = new TraceSubscriber();
    _subscriber.Publish +=
     new EventHandler<PublishEventArgs>(_subscriber_Publish);
    _subscriber.StartSubscription();
    _dataGrid.ItemsSource = _messages;
   }
  private void _subscriber_Publish(object sender, PublishEventArgs e) {
    _messages.Add(e.TraceMessage);
   if (_dataGrid.Columns.Count > 0) {
     _dataGrid.ScrollIntoView(e.TraceMessage, _dataGrid.Columns[0]);
    }
   }
   TraceSubscriber _subscriber;
   ObservableCollection<TraceMessage> _messages;
  }
}
```

```
Imports System
Imports System.Collections.ObjectModel
Imports System.Windows.Controls
Imports IdeaBlade.Core
Namespace IdeaBlade.Samples
 ''' <summary>
 ''' Sample trace subscriber.  You can drop the TraceViewer UserControl onto a page
 ''' to display tracing information from the Silverlight application in a grid.
 ''' </summary>
 ''' <remarks>
 ''' To use the TraceSubscriber: 1) listen for its Publish event,
 ''' and 2) call StartSubscription() to have tracing messages sent to you.
 ''' You can also call StopSubscription() to temporarily or permanently stop receiving messages.
 ''' </remarks>
 Partial Public Class TraceWindow
  Inherits UserControl
  Public Sub New()
    InitializeComponent()
    _messages = New ObservableCollection(Of TraceMessage)()
    _subscriber = New TraceSubscriber()
   AddHandler _subscriber.Publish, AddressOf _subscriber_Publish
    _subscriber.StartSubscription()
    _dataGrid.ItemsSource = _messages
  End Sub
  Private Sub _subscriber_Publish(ByVal sender As Object, _
   ByVal e As PublishEventArgs)
    _messages.Add(e.TraceMessage)
   If _dataGrid.Columns.Count > 0 Then
     _dataGrid.ScrollIntoView(e.TraceMessage, _dataGrid.Columns(0))
   End If
  End Sub
  Private _subscriber As TraceSubscriber
  Private _messages As ObservableCollection(Of TraceMessage)
 End Class
End Namespace
```

To add the user control to a page or another control, just add and style as needed:

```
XA <local:TraceWindow />
```

Prerequisites

- The Silverlight 5 Toolkit