

Created By: Chris Singleton ETL (SSIS)  
Three different ways you can add Today's Date to a given Time in SSIS.

**NewPatientsVisitsAddDateEmailValidatorETL - Microsoft Visual Studio**

File Edit View Project Build Debug Team Format SSIS Tools Architecture Test Analyze Window Help

SSIS Toolbox

- Favorites
  - Data Flow Task
  - Execute SQL Task
- Common
  - Analysis Services Proc...
  - Bulk Insert Task
  - Data Profiling Task
  - Execute Package Task
  - Execute Process Task
  - Expression Task
  - File System Task
  - FTP Task
  - Hadoop File System T...
  - Hadoop Hive Task
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- Containers
  - For Loop Container
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  - Sequence Container**
- Other Tasks
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  - Back Up Database Task
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  - Rebuild Index Task
  - Reorganize Index Task
  - Shrink Database Task

Information...

Server Explorer SSIS Toolbox

**NewPatientsVisitsA...orETL.dtsx [Design]**

Control Flow Data Flow Parameters Event Handlers Package Explorer

Incorporate today's date with given time Sequence Container

**Transfer Visits w/Derived Today's Date and Derived Clinic (handle NULL's).**

**Check for Data Files Before Processing**

- Check for File in Bellevue Script Task
- Check for File in Kirkland Script Task
- Check for File in Redmond Script Task

**Flat File to Flat File with Derived Data**

- Bellevue Derived Column DateTime Data Flow Task
- Kirkland Derived Column DateTime Data Flow Task
- Redmond Derived Column DateTime Data Flow Task

**Flat File to OLEDB Patients Database**

- Bellevue - Change Visits Date Data Flow Task
- Kirkland - Change Visits Date Data Flow Task
- Redmond - Change Visits Date Data Flow Task

Connection Managers

- 183.BellevueVisitsDerivedDTSourceFlatConn
- 183.KirklandVisitsDerivedDTSourceFlatConn
- 183.RedmondVisitsDerivedDTSourceFlatConn
- 1.BellevueEmailToValidateSourceFlatConn
- 1.BellevueNPORiginEmailSourceFlatFileConn
- 1.KirklandNPORiginEmailSourceFlatFileConn
- 1.RedmondNPORiginEmailSourceFlatFileConn
- 2.BellevueParseFlatEmailDestConn
- 2.BellevueVisitsDerivedDTDestFlatConn
- 2.KirklandValidEmailFlatFileDestConn
- 2.KirklandVisitsDerivedDestFlatConn
- 2.RedmondNPValidEmailDestFlatConn
- 2.RedmondVisitsDerivedDTDestFlatConn
- 3.BellevueNewPatientsValidEmailSourceFlatFileConn
- 3.KirklandNewPatientsValidEmailSourceFlatFileConn
- 3.RedmondNewPatientsValidEmailSourceFlatFileConn
- ErrorLog.Log
- localhost
- localhost.DoctorsSchedules
- localhost.DWCorporateReports
- PatientsPatientsOLEDBConn
- SQLServerBackUp

Output

Show output from: Build

Build complete -- 0 errors, 0 warnings  
===== Rebuild All: 1 succeeded, 0 failed, 0 skipped =====

Ready

11:32 PM 3/26/2017

Check to see if a file exists in a repository.

**NewPatientsVisitsAddDateEmailValidatorETL - Microsoft Visual Studio**

File Edit View Project Build Debug Team SSIS Tools Architecture Test Analyze Window Help

Develop... Any CPU Start

SSIS Toolbox

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  - Hadoop Hive Task
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  - Execute T-SQL State...
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  - Reorganize Index Task
  - Detach Database Task

Information...

Server Explorer SSIS Toolbox

Design View: NewPatientsVisitsA...orETL.dtsx [Design]

Control Flow Data Flow Parameters Event Handlers Package Explorer

Incorporate today's data with given time Sequence Container

Transfer Visits w/ Derived Today's Date and Derived Clinic (handle NULL's).

1. Script Task

2. Right Click, Choose Edit.

Check for Data Files Before Processing

Flat File to Flat File with Derived Data

Flat File to OLEDB Patients Database

Check for File in Bellevue Script Task

Check for File in Kirkland Script Task

Check for File in Redmond Script Task

Bellevue Derived Column Date/Time Data Flow Task

Bellevue - Change Visits Date Data Flow Task

Kirkland - Change Visits Date Data Flow Task

Redmond - Change Visits Date Data Flow Task

Connection Managers

183.BellevueVisitsDerivedDTSourcesFlatConn

1.BellevueEmailToValidateSourceFlatConn

1.RedmondNPORiginEmailSourceFlatFileConn

2.BellevueParseFlatEmailDestConn

2.KirklandValidEmailFlatFileDestConn

2.RedmondNPValidEmailDestFlatConn

2.RedmondVisitsDerivedDTDestFlatConn

3.BellevueNewPatientsValidEmailSourceFlatFileConn

3.KirklandNewPatientsValidEmailSourceFlatFileConn

3.RedmondNewPatientsValidEmailSourceFlatFileConn

ErrorLog.Log

localhost

localhost.DoctorsSchedules

localhost.DWCorporateReports

PatientsPatientsOLEDBConn

SQLServerBackUp

Output

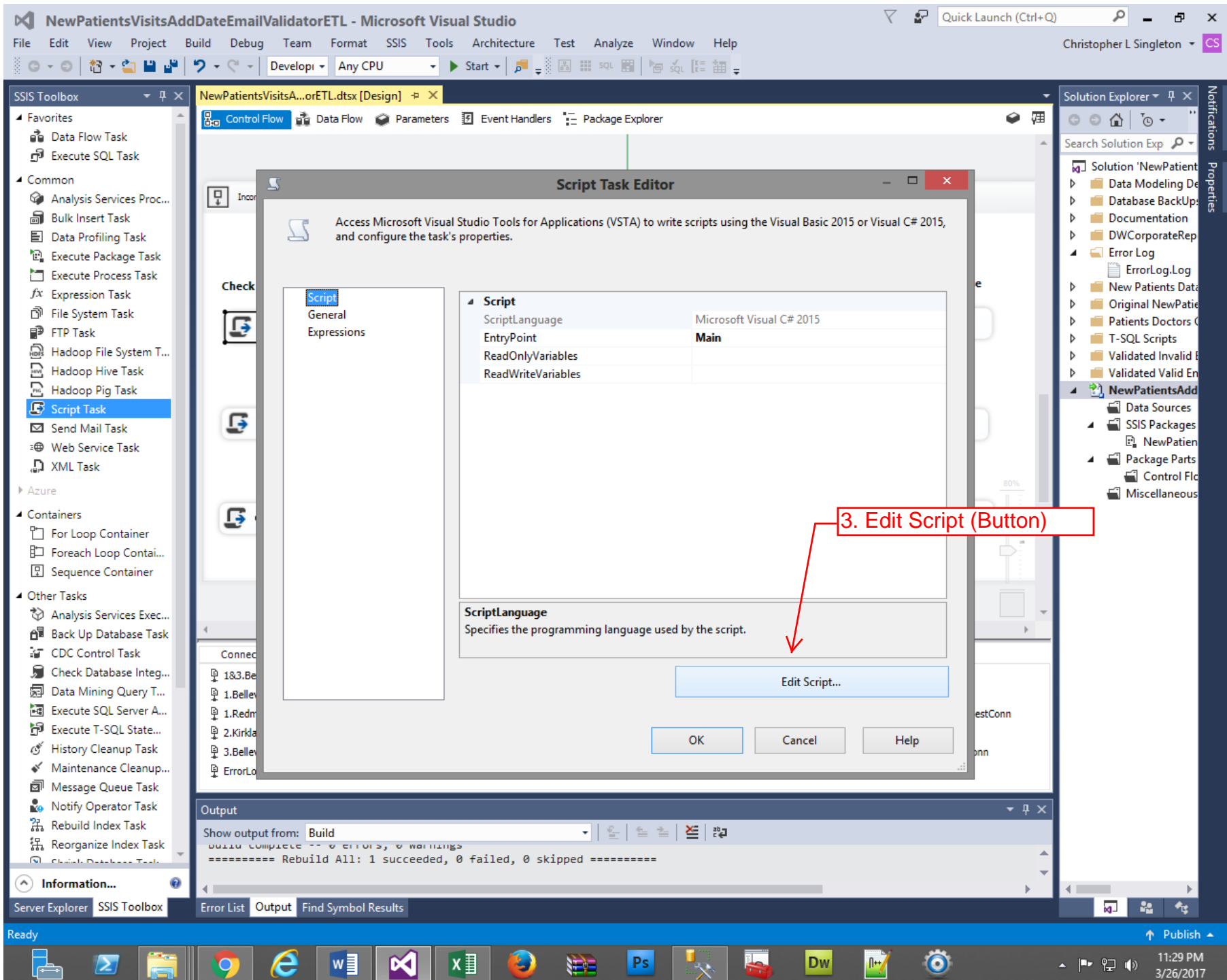
Show output from: Build

Build Complete - 0 errors, 0 warnings

===== Rebuild All: 1 succeeded, 0 failed, 0 skipped =====

Ready

11:29 PM 3/26/2017



Check to see if any flat file exists that has any word of [Visits.csv].

4. Add this code and point it to where your csv file should be:

```
static void TestFileExists()
{
    try
    {
        //Check to see if the file exists before doing anything.
        if (File.Exists(@"C:\_BISolutions\Module08 The "+"
                        "Final\Final\ClinicDailyData\Bellevue\*Visits.csv"))
        {
            //Do Nothing... and continue on.
        }
    }
    catch (System.Exception objException)
    {
        System.Console.WriteLine(objException.ToString());
        throw objException; //Must add this for the Main method to catch this exception.
    }
}

/// <summary>
/// This method is called when this script task executes in the control flow.
/// Before returning from this method, set the value of Dts.TaskResult to indicate success or failure.
/// To open Help, press F1.
/// </summary>
public void Main()
{
    try
    {
        TestFileExists();
        Dts.TaskResult = (int)ScriptResults.Success;
    }
    catch (Exception objException)
    {
        string strMessage = @"On Error, please check the file is in C:\_BISolutions\Module08 The "+"
                            "Final\Final\ClinicDailyData\Bellevue\ Folder";
        Dts.Events.FireError(0, strMessage, objException.ToString(), string.Empty, 0);
        Dts.TaskResult = (int)ScriptResults.Failure;
    }
}
```

1st way to code today's date with a given time value.

**NewPatientsVisitsAddDateEmailValidatorETL - Microsoft Visual Studio**

File Edit View Project Build Debug Team Format SSIS Tools Architecture Test Analyze Window Help

Develop... Any CPU Start SQL SQL [T=] [G=]

**SSIS Toolbox**

- Favorites
  - Data Flow Task**
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  - Message Queue...
  - Notify Operator...
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  - Reorganize Inde...
  - Shrink Database...

**1. Drag/Drop Data Flow Task.**

**NewPatientsVisitsA...orETL.dtsx [Design]**

Control Flow Data Flow Parameters Event Handlers Package Explorer

Incorporate today's date with given time Sequence Container

**Transfer Visits w/Derived Today's Date and Derived Clinic (handle NULL's).**

**Check for Data Files Before Processing**

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- Check for File in Redmond Script Task

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- Redmond - Change Visits Date Data Flow Task

**Connection Managers**

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- 1&3.KirklandVisitsDerivedDTSourceFlatConn
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- 1.RedmondNPORiginEmailSourceFlatFileConn
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- 3.RedmondNewPatientsValidEmailSourceFlatFileConn
- ErrorLog.Log
- localhost
- localhost.DoctorsSchedules
- localhost.DWCorporateReports
- PatientsPatientsOLEDBConn
- SQLServerBackup

**Output**

Show output from: Build

Build complete -- 0 errors, 0 warnings

===== Rebuild All: 1 succeeded, 0 failed, 0 skipped =====

Server Explo... SSIS Toolbox Error List Output Find Symbol Results

Ready Publish

11:17 PM 3/26/2017

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File Edit View Project Build Debug Team Format SSIS Tools Architecture Test Analyze Window Help

Christopher L Singleton CS

SSIS... [X] NewPatientsVisitsA...orETL.dtsx [Design] [X]

Control Flow Data Flow Parameters Event Handlers Package Explorer

Incorporate today's date with given time Sequence Container

Transfer Visits w/Derived Today's Date and Derived Clinic (handle NULL's).

2. Right Click, Edit.

Check for Data Files Before Processing Flat File to Flat File with Derived Data Flat File to OLEDB Patients Database

Check for File in Bellevue Script Task Bellevue Derived Column DateTime Data Flow Task

Check for File in Kirkland Script Task Kirkland Derived Column DateTime Data Flow Task

Check for File in Redmond Script Task Redmond Derived Column DateTime Data Flow Task

Connection Managers

- 2.RedmondVisitsDerivedDTDestFlatConn
- 3.BellevueNewPatientsValidEmailSourceFlatFileConn
- 3.KirklandNewPatientsValidEmailSourceFlatFileConn
- 3.RedmondNewPatientsValidEmailSourceFlatFileConn
- ErrorLog.Log
- localhost
- localhost.DoctorsSchedules
- localhost.DWCorporateReports
- PatientsPatientsOLEDBConn
- SQLServerBackUp

Output

Show output from: Build

Build Complete -- 0 errors, 0 warnings

===== Rebuild All: 1 succeeded, 0 failed, 0 skipped =====

Ready Publish

11:08 PM 3/26/2017



NewPatientsVisitsAddDateEmailValidatorETL - Microsoft Visual Studio

File Edit View Project Build Debug Team Format SSIS Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q)

Christopher L Singleton

SSIS... [X]

NewPatientsVisitsAddDateEmailValidatorETL.dtsx [Design]

Control Flow Data Flow Parameters Event Handlers Package Explorer

Data Flow Task: Bellevue Derived Column Date Time Data Flow Task

Bellevue Derived Column Creation

Move the Information from the Source Flat File to another Flat File (preserve original content) and Create an integrated DateTime Derived Column

1and3 Bellevue Visits Flat File Source

Bellevue Visits Derived Column

Bellevue Visits Flat File Destination

This section uses two connections (Input and Output).

1&3. BellevueVisitsDerivedDTSourceFlatConn (Input)

2. BellevueVisitsDerivedDTDestFlatConn (Output)

Note: Use a Data Conversion component right after the Derived Column. Or you can do it the other way Or with both ways together AS shown.

Data Conversion (Not shown)

Edit...

Show Advanced Editor...

Group

Autosize

Add Path

Zoom

Cut Ctrl+X

Copy Ctrl+C

Paste Ctrl+V

Delete Del

Rename

Properties Alt+Enter

Connection Managers

1&3.BellevueVisitsDerivedDTSourceFlatConn 1&3.KirklandVisitsDerivedDTSourceFlatConn 1&3.RedmondVisitsDerivedDTSourceFlatConn 1.BellevueEmailToValidateSourceFlatConn

1.BellevueNPOriginEmailSourceFlatFileConn 1.KirklandNPOriginEmailSourceFlatFileConn 1.RedmondNPOriginEmailSourceFlatFileConn 2.BellevueParseFlatEmailDestConn

2.BellevueVisitsDerivedDTDestFlatConn 2.KirklandValidEmailFlatFileDestConn 2.KirklandVisitsDerivedDestFlatConn 2.RedmondNPValidEmailDestFlatConn

Output

Show output from: Build

Build Complete -- 0 errors, 0 warnings

===== Rebuild All: 1 succeeded, 0 failed, 0 skipped =====

Inf...

Serv... SSIS...

Error List Output Find Symbol Results

Solution Explorer

Search Solution

Data M... Datab... Docum... DWCo... Error L... Err... New P... Origin... Patien... T-SQL... Validat... Validat...

NewF... Da... SS... Pa... Mi...

Ready

Publish

11:06 PM

1st way to code today's date with a given time value.

Setting up the format for [DateTime]:

Specify the expressions used to create new column values, and indicate whether the values update existing columns or populate new columns.

**Variables and Parameters**

- System Variables
- User::Date

**Columns**

- Time
- Patient
- Doctor
- Procedure
- Charge

**String Functions**

- Date/Time Functions**
  - DATEADD( «datepart», «number», «date» )
  - DATEDIFF( «datepart», «startdate», «enddate» )
  - DATEPART( «datepart», «date» )
  - DAY( «date» )
  - GETDATE()
  - GETUTCDATE()
  - MONTH( «date» )
  - YEAR( «date» )

**Functions**

Description:

Derived Column Name	Derived Column	Expression	Data
Time	Replace 'Time'	(DT_WSTR,4)DATEPART("yyyy",GETDATE()) + RIGHT("0" + (DT_WSTR,2)DATEPART("mm",GETDATE()),2) + RIGHT("0" + (DT_WSTR,2)DATEPART("dd",GETDATE()),2) + Time	Unic

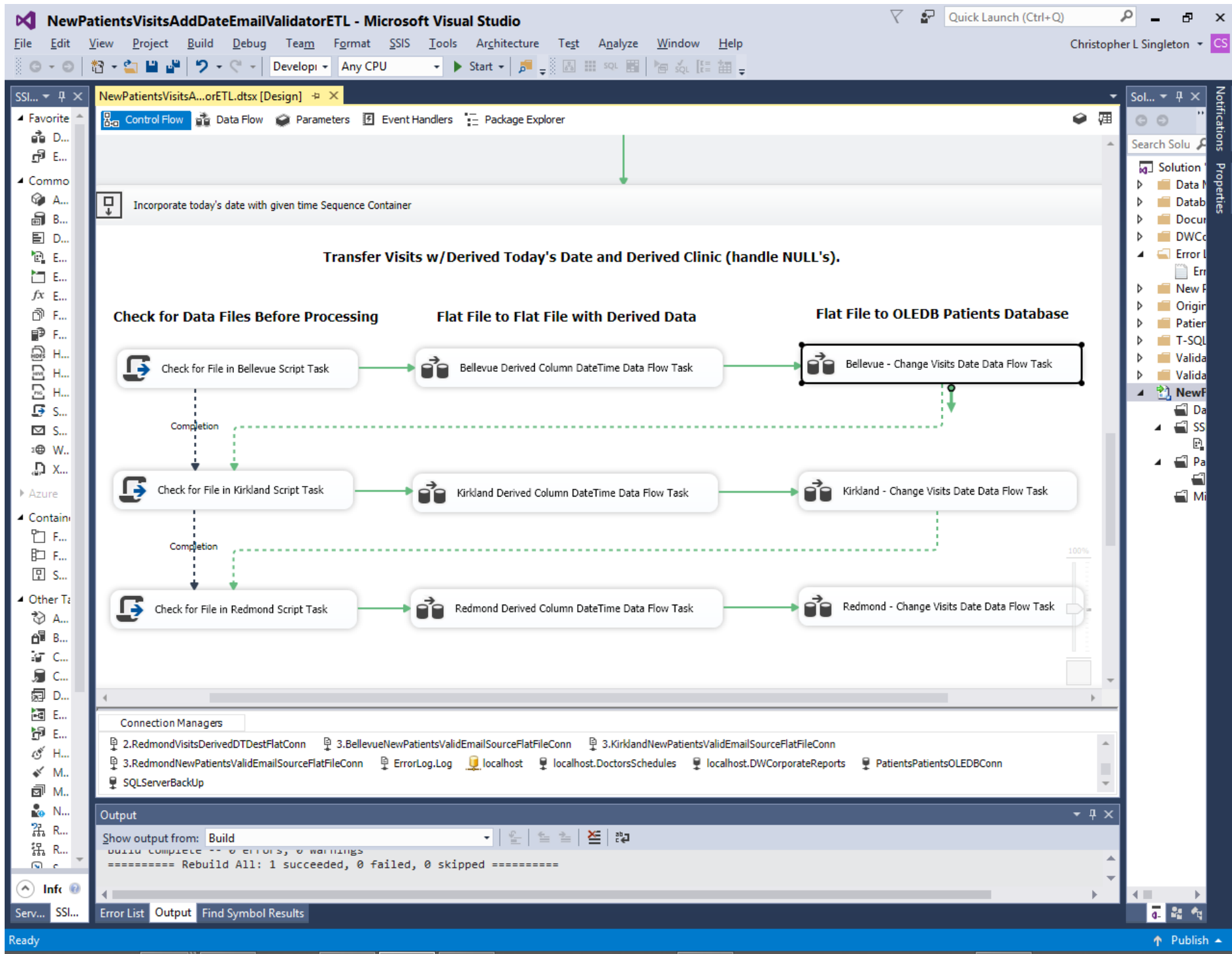
Code (DT\_WSTR 50) Then convert the string to DateTimeStamp using Data Conversion directly:

```
(DT_WSTR,4)DATEPART("yyyy",GETDATE()) + RIGHT("0" + (DT_WSTR,2)DATEPART("mm",GETDATE()),2) + RIGHT("0" + (DT_WSTR,2)DATEPART("dd",GETDATE()),2) + Time
```

Configure Error Output... OK Cancel Help



2st way to code today's date with a given time value (Using C#).



**NewPatientsVisitsAddDateEmailValidatorETL - Microsoft Visual Studio**

File Edit View Project Build Debug Team Format SSIS Tools Architecture Test Analyze Window Help

Quick Launch (Ctrl+Q) Christopher L Singleton CS

SSIS Toolbox

- Favorites
  - Destination Assistant
  - Source Assistant
- Common
  - Aggregate
  - Balanced Data Distributor
  - Conditional Split
  - Data Conversion
  - Data Streaming Destination
  - Derived Column
  - HDFS File Destination
  - HDFS File Source
  - Lookup
  - Merge
  - Merge Join
  - Multicast
  - OData Source
  - ODBC Destination
  - ODBC Source
  - OLE DB Command
  - Row Count
  - Script Component
  - Slowly Changing Dimension
  - Sort
  - Union All
- Azure
- Other Transforms
  - Audit
  - Cache Transform
  - CDC Splitter
  - Character Map
  - Copy Column
  - Data Mining Query
  - DQS Cleansing
  - Export Column
  - Fuzzy Grouping
  - Fuzzy Lookup
  - Import Column
  - Percentage Sampling

Information...

Server Explorer SSIS Toolbox

**NewPatientsVisitsA...orETL.dtsx [Design]**

Control Flow Data Flow Parameters Event Handlers Package Explorer

Data Flow Task: Bellevue - Change Visits Date Data Flow Task

**Bellevue Visits Flat File to OLEDB Patients Database**

**Note: The script Component C# Scripting Sets the Environmental Culture DateTime format for the column specified (DateTime).**

**This section uses two connections (Input and Output).**

**1&3. BellevueVisitsScriptComSourceFlatConn (Input)**  
**4. BellevueVisitsScriptComOLEDBDestConn (Output)**

1&3\_Bellevue Visits Flat File Source

Bellevue Derived Column (Clinic)

Bellevue Visits Script Component

Bellevue Visits OLE DB Destination

Connection Managers

- 1&3.BellevueVisitsDerivedDTSourceFlatConn
- 1&3.KirklandVisitsDerivedDTSourceFlatConn
- 1&3.RedmondVisitsDerivedDTSourceFlatConn
- 1.BellevueEmailToValidateSourceFlatConn
- 1.BellevueNPOrginEmailSourceFlatFileConn
- 1.KirklandNPOrginEmailSourceFlatFileConn
- 1.RedmondNPOrginEmailSourceFlatFileConn
- 2.BellevueParseFlatEmailDestConn
- 2.BellevueVisitsDerivedDTDestFlatConn

Output

Show output from: Build

Build complete -- 0 errors, 0 warnings

===== Rebuild All: 1 succeeded, 0 failed, 0 skipped =====

Ready Publish

2st way to code today's date with a given time value.

Hardcode in C# using a Script Component:

SC\_cf53fdc7165a4bb098714f934100c952\ComponentWrapper.cs (2)

36 : Input0\_ProcessInputRow(Buffer);

40 : public virtual void Input0\_ProcessInputRow(Input0Buffer Row)

[Show on Code Map](#) | [Collapse All](#)

//

2 references

```
public override void Input0_ProcessInputRow(Input0Buffer Row)
{
```

```
    var Date = DateTime.Now.Date;
```

```
    if (!Row.Time_IsNull && !string.IsNullOrEmpty(Row.Time.Trim()))
    {
```

```
        Row.OutTime = DateTime.ParseExact(Row.Time.Trim(), new string[] {Date +
            "HH:mm",
            "H:mm"
```

```
        }, new System.Globalization.CultureInfo("En-US"), System.Globalization.DateTimeStyles.None)
```

```
    }
```

```
    else
```

```
    {
```

```
        Row.OutTime_IsNull = true;
```

```
    }
```

```
}
```

Code Below:

```
public override void Input0_ProcessInputRow(Input0Buffer Row)
{
    var Date = DateTime.Now.Date;

    if (!Row.Time_IsNull && !string.IsNullOrEmpty(Row.Time.Trim()))
    {
        Row.OutTime = DateTime.ParseExact(Row.Time.Trim(), new string[] {Date +
            "HH:mm",
            "H:mm"
        }, new System.Globalization.CultureInfo("En-US"), System.Globalization.DateTimeStyles.None);
    }
    else
    {
        Row.OutTime_IsNull = true;
    }
}
```

Note: The third way is to mix both ways together, C# converts the [Data + time] string automatically.