



FanXE

Fantastic XML Editor

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Banking Analysis Section

Division of Monetary Affairs

Board of Governors of the Federal Reserve System

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Introduction

● GUI overview



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- GUI overview
- Command Line Interface



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- Application Examples



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 - **ItemSet**: Report Form Meta Data



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 - **tdom** versus **tcldom**



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 - **tdom** versus **tcldom**
 - **Tkhtml** versus **ihtml**
 - **Tix** versus **BLT**



GUI Overview

ItemSet V1.52 -- Production

[F10] [Edit] [16:25:21] Showing fanxe://CallIndex/Series[@MDRM='4174'] [Exit]

Search: Trim

Tree: CallIndex //Series[@MDRM='4174'] Trim

Call Report Index

Uniform Item Set

- 00001-09996: Hidden
- 09997-14999: Income
- 15000-19999: Expense
 - 15000 STFBE Expenses
 - 15300 STFBEI Total interest ex
 - 15310 HO_STFBEI_XDO Total interest ex
 - 15320 HO_STFBEI_XFO Total interest ex
 - 15400 STFBEID On deposits
 - 15500 STFBEID_XDO On deposits
 - 15600 STFBEID_XFO On deposits
 - 15700 STFBEIDT_XDO Transaction accou
 - 15800 STFBEIDNL_XDO Nontransactions a
 - 15900 STFBEIDNS_XDO Savings (includin
 - 16000 STFBEIDNL_XDO Large time (depos
 - 16100 STFBEIDNO_XDO Small time (depos
 - 16200 STFBEIF Of Federal Funds
 - 16300 STFBEIT On demand notes i
 - 16400 HO_STFBEI11 On mortgage indeb
 - 16500 STFBEIS On subordinated n
 - 16540 STFBEIH Memo:
 - 16550 HO_STFBEI11_XFO Intracompany
 - 16600 STFBEIN Total noninterest
 - 16610 STFBEIN_XDA Total noninterest
 - 16620 STFBEIN_XFA Total noninterest
 - 16700 STFBEIS Salaries and empl
 - 16800 STFBEINB Of premises and f
 - 16900 STFBEINO Other
 - 16905 STFBEINOC Data processing e
 - 16910 STFBEINOH Advertising and m
 - 16915 STFBEINOD Directors' fees
 - 16920 STFBEINOS Printing, station
 - 16925 STFBEINOP Postage
 - 16930 STFBEINOL Legal fees and ex
 - 16935 STFBEINOF FDIC deposit insu
 - 17000 STFBEIP Provisions for lo
 - 17100 STFBEPL Loan and lease lo
 - 17110 STFBEPL_XFA Loan and lease lo
 - 17200 HO_STFBEIPA allocated transfe
- 20000-24999: Net income
- 25000-39999: Assets
- 40000-40999: Securities (held to maturi
- 41000-41999: Securities (available for
- 42000-44999: Total securities
- 45000-54999: Liabilities
- 55000-59999: Capital account
- 60000-60999: Regulatory capital
- 61000-62999: Miscellaneous
- 63000-64999: Maturity and repricing
- 65000-67399: Net charge-offs
- 67400-69699: Gross charge-offs
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- 72000-74298: Delinquencies
- 74299-76599: Past-due 30 days or more
- 76600-78899: Nonaccrual
- 78900-79099: Renotiated (troubled) deb
- 79100-79999: Past-due 90 days or more
- 80000-89999: Off-balance sheet
- 90000-94999: Schedule-K Assets
- 95000-99999: Schedule-K Liabilities

Fed Nomenclature Tree

15500 STFBEID_XDO On deposits

15500 STFBEID_XDO On deposits

Booked in Domestic Offices; Flow;

Formula

Date: 1987/03-9999/12

= +CAL15400-CAL15600 (Depth 3)

= +STFBEID -STFBEID_XFO

Input Series

Date: 1984/09-1986/12

FFIEC-031: +RIAD4174+RIAD4176

FFIEC-032: +RIAD4174+RIAD4176

Log

Edit: 15310

N	Historical	Fedname	Quarterly Average	Attributable (Domestic Foreign)	Booked (Domestic Foreign)	Market Value Securities	Book Value Securities	Taxable Equivalent
15310	<input checked="" type="checkbox"/>	HO: STFBEI	<input type="checkbox"/> _XQR	<input type="checkbox"/> _XDA <input type="checkbox"/> _XFA	<input checked="" type="checkbox"/> _XDO <input type="checkbox"/> _XFO	<input type="checkbox"/> _XMVS	<input type="checkbox"/> _XBVS	<input type="checkbox"/> _XTE

Description: Total interest expense Flow

Type: Formula

Date: 19840930 - 20001231

Depth: 4

Add 15300 15320 13450 16550



Tree Pane

- [-] Call Report Index
- [-] Uniform Item Set
 - [-] 00001-09996: Hidden
 - [-] 09997-14999: Income
 - [-] 15000-19999: Expense
 - [-] 20000-24999: Net income
 - [-] 25000-39999: Assets
 - [-] 25000 STFBA Total Assets
 - [-] 25200 STFBA_XFO Total Assets
 - [-] 40000-40999: Securites (held to maturity)
 - [-] 41000-41999: Securites (available for sal
 - [-] 42000-44999: Total securities
 - [-] 45000-54999: Liabilities
 - [-] 55000-59999: Capital account
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 - [-] 90000 STFBA_XQA Total Assets
 - [-] 95000-99999: Schedule-K Liabilities
- [-] Fed Nomenclature Tree
- [-] Size Groups
- [-] Seasonal Adjustment
- [-] New Items
- [-] FanXE Configuration
- [-] User Preferences



Tree Pane

XML Documents (DOMs)

The screenshot shows a tree view with the following items:

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Tree Pane

```
<Section Range="25000-39999" Title="Assets">
  <Series N="25000" Fedname="STFBA">Total Assets
    <Item Type="Formula" BeginDate="19840930" EndDate="99991231">
      <Formula Depth="10">
        <CAL f="+">25300</CAL>
        <CAL f="+">37300</CAL>
        <Alias> +STFBAI +STFBAN</Alias>
      </Formula>
    </Item>
    <Note>RCFD2170</Note>
  </Series>
```

The screenshot shows a tree view with the following structure:

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Selecting a node on the tree will apply a style sheet and display the results in the View Pane.

The screenshot displays a tree view with the following structure:

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View Pane

← → ? 25000 STFBA Total Assets

Edit

25000 STFBA Total Assets

Formula

Date: 1984/09-9999/12

= +[CAL25300](#)+[CAL37300](#) (Depth 10)

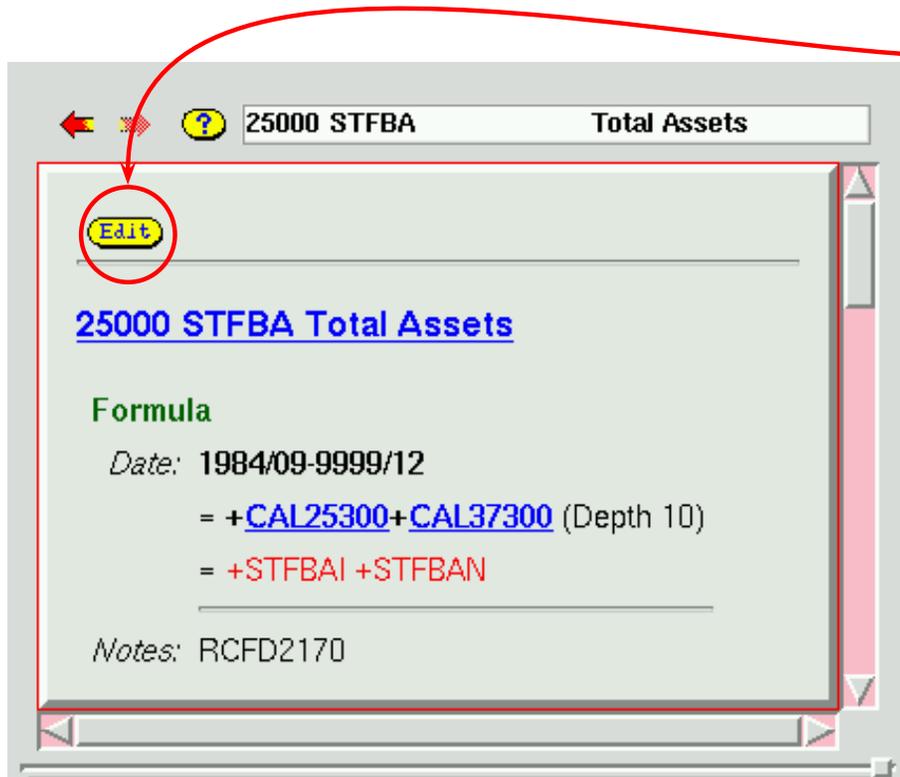
= +STFBAI +STFBAN

Notes: RCFD2170

```
<Section Range="25000-39999" Title="Assets">
  <Series N="25000" Fedname="STFBA">Total Assets
    <Item Type="Formula" BeginDate="19840930" EndDate="99991231">
      <Formula Depth="10">
        <CAL f="+">25300</CAL>
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        <Alias> +STFBAI +STFBAN</Alias>
      </Formula>
    </Item>
    <Note>RCFD2170</Note>
  </Series>
```



View Pane



Selecting the **Edit** button will apply another style sheet and open the results in the Tab Paned.



Tab Pane

Log Close 25000 STFBA Total Assets

Edit: 25000
Size: _XS3A4

Save Refresh XML/ Cancel

N	Historical	Fedname	Quarterly Average	Attributable (Domestic Foreign)	Booked (Domestic Foreign)	Market Value Securities	Book Value Securities	Taxable Equivalent
25000	<input type="checkbox"/> H0.	STFBA	<input type="checkbox"/> _XQA	<input type="checkbox"/> _XDA <input type="checkbox"/> _XFA	<input type="checkbox"/> _XDO <input type="checkbox"/> _XFO	<input type="checkbox"/> _XMVS	<input type="checkbox"/> _XBVS	<input type="checkbox"/> _XTE

Description: Flow

Type: Delete Duplicate Add Balance Sheet Equivalent

Date: -

Depth:

Add

Alias:

Add an Input Series Add a Formula Add a Split Add a Placeholder

Notes: Delete

Save Refresh XML/ Cancel



Tab Pane

Log Close 25000 STFBA Total Assets

Edit: 25000
Size: _XS3A4

Save Refresh <XML> Cancel

N	Historical	Fedname	Quarterly Average	Attributable (Domestic Foreign)	Booked (Domestic Foreign)	Market Value Securities	Book Value Securities	Taxable Equivalent
25000	<input type="checkbox"/> H0.	STFBA	<input type="checkbox"/> _XQA	<input type="checkbox"/> _XDA <input type="checkbox"/> _XFA	<input type="checkbox"/> _XDO <input type="checkbox"/> _XFO	<input type="checkbox"/> _XMVS	<input type="checkbox"/> _XBVS	<input type="checkbox"/> _XTE

Description: Flow

Type: Delete Duplicate Add Balance Sheet Equivalent

Date: -

Depth:

Add

Alias:

Add an Input Series Add a Formula Add a Split Add a Placeholder

Notes: Delete

Save Refresh <XML> Cancel

```
<Section Range="25000-39999" Title="Assets">
  <Series N="25000" Fedname="STFBA">Total Assets
    <Item Type="Formula" BeginDate="19840930" EndDate="99991231">
      <Formula Depth="10">
        <CAL f="+">25300</CAL>
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        <Alias> +STFBAI +STFBAN</Alias>
      </Formula>
    </Item>
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  </Series>
```



Tab Pane

Log Close 25000 STFBA Total Assets

Edit: 25000
Size: _XS3A4

Save Refresh XML Cancel

N	Historical	Fedname	Quarterly Average	Attributable (Domestic Foreign)	Booked (Domestic Foreign)	Market Value Securities	Book Value Securities	Taxable Equivalent
25000	<input type="checkbox"/> H0	STFBA	<input type="checkbox"/> _XQA	<input type="checkbox"/> _XDA <input type="checkbox"/> _XFA	<input type="checkbox"/> _XDO <input type="checkbox"/> _XFO	<input type="checkbox"/> _XMVS	<input type="checkbox"/> _XBVS	<input type="checkbox"/> _XTE

Description: Flow

Type: Delete Duplicate Add Balance Sheet Equivalent

Date: -

Depth:

Add + -

Alias:

Add an Input Series Add a Formula Add a Split Add a Placeholder

Notes: Delete

Save Refresh XML Cancel

```
<Section Range="25000-39999" Title="Assets">
  <Series N="25000" Fedname="STFBA">Total Assets
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Tab Pane

Log Close 25000 STFBA Total Assets

Edit: 25000
Size: _XS3A4

Save Refresh <XML> Cancel

N	Historical	Fedname	Quarterly Average	Attributable (Domestic Foreign)	Booked (Domestic Foreign)	Market Value Securities	Book Value Securities	Taxable Equivalent
25000	<input type="checkbox"/> H0.	STFBA	<input type="checkbox"/> _XQA	<input type="checkbox"/> _XDA <input type="checkbox"/> _XFA	<input type="checkbox"/> _XDO <input type="checkbox"/> _XFO	<input type="checkbox"/> _XMVS	<input type="checkbox"/> _XBVS	<input type="checkbox"/> _XTE

Description: Flow

Type: Delete Duplicate Add Balance Sheet Equivalent

Date: -

Depth:

Add

Alias:

Add an Input Series Add a Formula Add a Split Add a Placeholder

Notes: Delete

Save Refresh <XML> Cancel

```
<Section Range="25000-39999" Title="Assets">
  <Series N="25000" Fedname="STFBA">Total Assets
    <Item Type="Formula" BeginDate="19840930" EndDate="99991231">
      <Formula Depth="10">
        <CAL f="+>25300</CAL>
        <CAL f="+>37300</CAL>
        <Alias> +STFBAI +STFBAN</Alias>
      </Formula>
    </Item>
    <Note>RCFD2170</Note>
  </Series>
```



Tab Pane

Log Close 25000 STFBA Total Assets

Edit: 25000
Size: _XS3A4

Save Refresh XML Cancel

N	Historical	Fedname	Quarterly Average	Attributable (Domestic Foreign)	Booked (Domestic Foreign)	Market Value Securities	Book Value Securities	Taxable Equivalent
25000	<input type="checkbox"/> H0	STFBA	<input type="checkbox"/> _XQA	<input type="checkbox"/> _XDA <input type="checkbox"/> _XFA	<input type="checkbox"/> _XDO <input type="checkbox"/> _XFO	<input type="checkbox"/> _XMVS	<input type="checkbox"/> _XBVS	<input type="checkbox"/> _XTE

Description: Flow

Type: Formula Delete Duplicate Add Balance Sheet Equivalent

Date:

Depth:

Add

Alias:

Add an Input Series Add a Formula Add a Split Add a Placeholder

Notes: Delete

Save Refresh XML Cancel

```
<Section Range="25000-39999" Title="Assets">
  <Series N="25000" Fedname="STFBA">Total Assets
    <Item Type="Formula" BeginDate="19840930" EndDate="99991231">
      <Formula Depth="10">
        <CAL f="+>25300</CAL>
        <CAL f="+>37300</CAL>
        <Alias> +STFBAI +STFBAN</Alias>
      </Formula>
    </Item>
    <Note>RCFD2170</Note>
  </Series>
```



Tab Pane

Log Close 25000 STFBA Total Assets

Edit: 25000
Size: _XS3A4

Save Refresh <XML> Cancel

N	Historical	Fedname	Quarterly Average	Attributable (Domestic Foreign)	Booked (Domestic Foreign)	Market Value Securities	Book Value Securities	Taxable Equivalent
25000	<input type="checkbox"/> H0.	STFBA	<input type="checkbox"/> _XQA	<input type="checkbox"/> _XDA <input type="checkbox"/> _XFA	<input type="checkbox"/> _XDO <input type="checkbox"/> _XFO	<input type="checkbox"/> _XMVS	<input type="checkbox"/> _XBVS	<input type="checkbox"/> _XTE

Description: Flow

Type: Delete Duplicate Add Balance Sheet Equivalent

Date: -

Depth:

Add + +

Alias:

Add an Input Series Add a Formula Add a Split Add a Placeholder

Notes: Delete

Save Refresh <XML> Cancel

```
<Section Range="25000-39999" Title="Assets">  
<Series N="25000" Fedname="STFBA">Total Assets  
<Item Type="Formula" BeginDate="19840930" EndDate="99991231">  
<Formula Depth="10">  
<CAL f="+25300"/CAL>  
<CAL f="+37300"/CAL>  
<Alias>+STFBAI +STFBAN</Alias>  
</Formula>  
</Item>  
<Note>RCFD2170</Note>  
</Series>
```



Tab Pane

Log Close 25000 STFBA Total Assets

Edit: 25000
Size: _XS3A4

Save Refresh <XML> Cancel

N	Historical	Fedname	Quarterly Average	Attributable (Domestic Foreign)	Booked (Domestic Foreign)	Market Value Securities	Book Value Securities	Taxable Equivalent
25000	<input type="checkbox"/> H0.	STFBA	<input type="checkbox"/> _XQA	<input type="checkbox"/> _XDA <input type="checkbox"/> _XFA	<input type="checkbox"/> _XDO <input type="checkbox"/> _XFO	<input type="checkbox"/> _XMVS	<input type="checkbox"/> _XBVS	<input type="checkbox"/> _XTE

Description: Flow

Type: Delete Duplicate Add Balance Sheet Equivalent

Date: -

Depth:

Add

Alias:

Add an Input Series Add a Formula Add a Split Add a Placeholder

Notes: Delete

Save Refresh <XML> Cancel

```
<Section Range="25000-39999" Title="Assets">
  <Series N="25000" Fedname="STFBA">Total Assets
    <Item Type="Formula" BeginDate="19840930" EndDate="99991231">
      <Formula Depth="10">
        <CAL f="+25300"/>
        <CAL f="+37300"/>
        <Alias>+STFBAI +STFBAN</Alias>
      </Formula>
    </Item>
    <Note>RCFD2170</Note>
  </Series>
```



Tab Pane

The screenshot shows the Fantastic XML Editor interface. At the top, there is a tab labeled '25000 STFBA' with the title 'Total Assets'. Below the tab are buttons for 'Close', 'Save', 'Refresh', '<XML/>', and 'Cancel'. On the left side, there is a 'Log' button, an 'Edit: 25000' button, and a 'Size: _XS3A4' label. The main area contains a table with the following columns: N, Historical, Fedname, Quarterly Average, Attributable (Domestic Foreign), Booked (Domestic Foreign), Market Value Securities, Book Value Securities, and Taxable Equivalent. The table has one row with the following values: 25000, [] H0, STFBA, [] _XQA, [] _XDA, [] _XDO, [] _XMVS, [] _XBVS, [] _XTE. Below the table is a 'Description: Total Assets' field with a 'Flow' checkbox. Underneath is a 'Type: Formula' field, which is circled in red. To the right of the 'Type' field are buttons for 'Delete', 'Duplicate', and 'Add Balance Sheet Equivalent'. Below the 'Type' field is a 'Date: 19840930 - 99991231' field, a 'Depth: 10' field, and an 'Add' button. Below the 'Add' button are two input fields with values '25300' and '37300', and several icons. Below the input fields is an 'Alias: +STFBAI +STFBAN' field. At the bottom of the main area are buttons for 'Add an Input Series', 'Add a Formula', 'Add a Split', and 'Add a Placeholder'. Below these buttons is a 'Notes: RCFD2170' field with a 'Delete' button. At the very bottom of the interface are buttons for 'Save', 'Refresh', '<XML/>', and 'Cancel'.

```
<Section Range="25000-39999" Title="Assets">
  <Series N="25000" Fedname="STFBA">Total Assets
    <Item Type="Formula" BeginDate="19840930" EndDate="99991231">
      <Formula Depth="10">
        <CAL f="+">25300</CAL>
        <CAL f="+">37300</CAL>
        <Alias> +STFBAI +STFBAN</Alias>
      </Formula>
    </Item>
    <Note>RCFD2170</Note>
  </Series>
```



Tab Pane

The screenshot shows the Fantastic XML Editor interface. At the top, there's a tab labeled '25000 STFBA' with the title 'Total Assets'. Below the tab are buttons for 'Close', 'Save', 'Refresh', '<XML/>', and 'Cancel'. On the left, there's a 'Log' section with 'Edit: 25000' and 'Size: _XS3A4'. The main area contains a table with columns: N, Historical, Fedname, Quarterly Average, Attributable (Domestic Foreign), Booked (Domestic Foreign), Market Value Securities, Book Value Securities, and Taxable Equivalent. The table has one row with values: 25000, H0, STFBA, _XQA, _XDA, _XDO, _XMVS, _XBVS, _XTE. Below the table is a 'Description' field containing 'Total Assets' and a 'Flow' checkbox. A red circle highlights the 'Type' field, which is set to 'Formula'. Below this are fields for 'Date' (19840930 - 99991231) and 'Depth' (10). There are also input fields for values 25300 and 37300, and an 'Alias' field containing '+STFBAI +STFBAN'. At the bottom of the description section are buttons: 'Add an Input Series', 'Add a Formula', 'Add a Split', and 'Add a Placeholder'. A blue circle highlights the 'Add a Formula' button. Below the description is a 'Notes' field containing 'RCFD2170' and a 'Delete' button. At the very bottom are buttons for 'Save', 'Refresh', '<XML/>', and 'Cancel'.

```
<Section Range="25000-39999" Title="Assets">
  <Series N="25000" Fedname="STFBA">Total Assets
    <Item Type="Formula" BeginDate="19840930" EndDate="99991231">
      <Formula Depth="10">
        <CAL f="+">25300</CAL>
        <CAL f="+">37300</CAL>
        <Alias> +STFBAI +STFBAN</Alias>
      </Formula>
    </Item>
    <Note>RCFD2170</Note>
  </Series>
```



GUI Configuration

itemset #2: Edit Tree

Close Tree

Save Refresh <XML/> Cancel

DisplayStyle: Toplevel

Browse: UniformSeries

Edit:

Name: Section

Title: set title "[node @Range]; [node @Title]"

Open when loaded:

Browse: Section

Edit:

DisplayStyle: Section

Insert Delete Duplicate Add a Child Add a Sibling Add saveNode script

Name: Series

Title: set title [Format %5s [node @N1]]
set fedname {}
foreach a { Historical
Fedname

Open when loaded:

Browse: SeriesBrowse

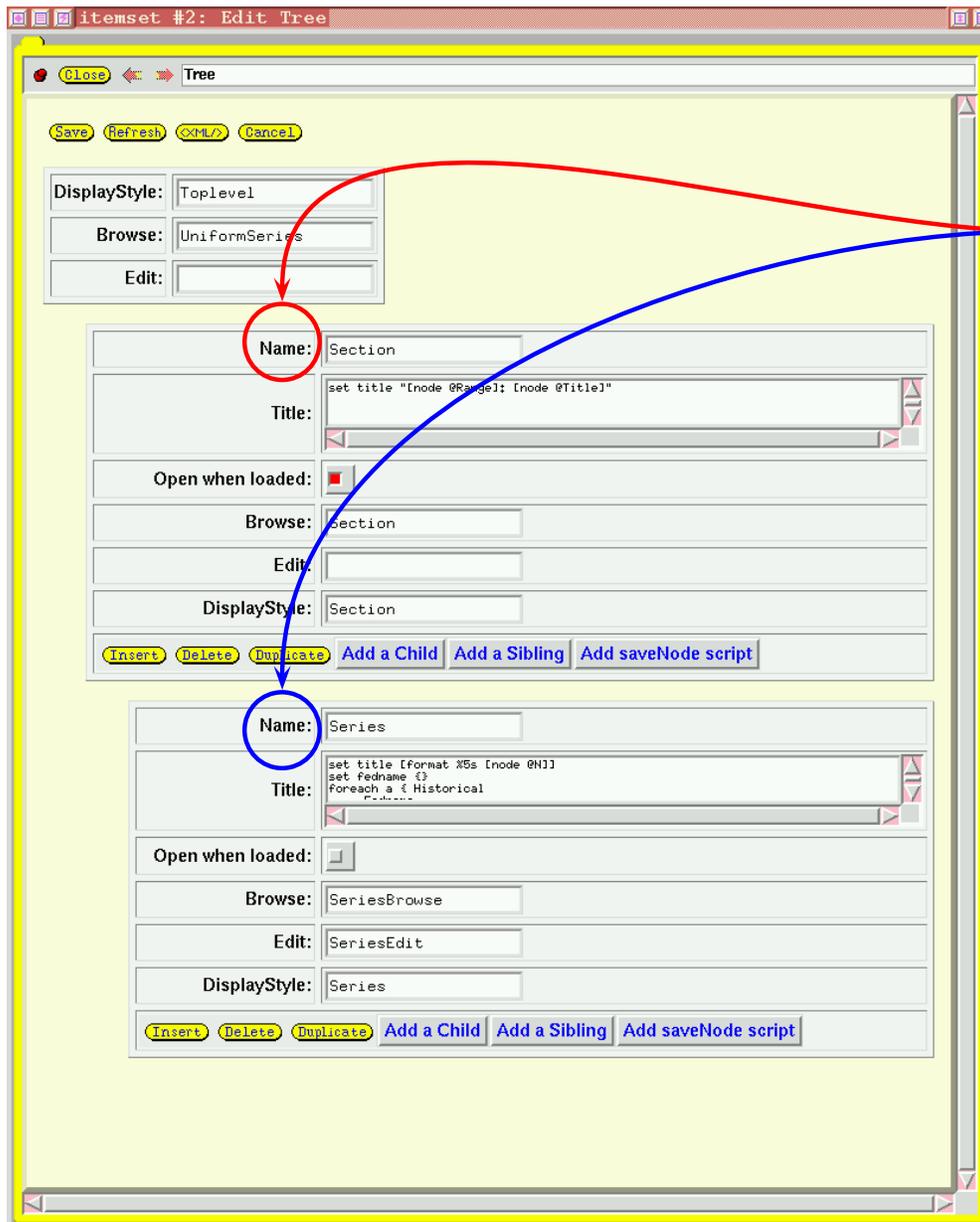
Edit: SeriesEdit

DisplayStyle: Series

Insert Delete Duplicate Add a Child Add a Sibling Add saveNode script



GUI Configuration



“Name” of the element to be displayed in the Tree.



GUI Configuration

The screenshot shows the 'itemset #2: Edit Tree' window. It contains two configuration panels. The top panel is for an element named 'Section'. Its 'Name' field is circled in red. The bottom panel is for an element named 'Series'. A red arrow points from the circled 'Name' field in the 'Section' panel to the XML code block on the right.

“Name” of the element to be displayed in the Tree.

```
<Section Range="25000-39999" Title="Assets">
  <Series N="25000" Fedname="STFBA">Total Assets
    <Item Type="Formula" BeginDate="19840930" EndDate="99991231">
      <Formula Depth="10">
        <CAL f="+">25300</CAL>
        <CAL f="+">37300</CAL>
        <Alias> +STFBAI +STFBAN</Alias>
      </Formula>
    </Item>
    <Note>RCFD2170</Note>
  </Series>
```



GUI Configuration

itemset #2: Edit Tree

Close Tree

Save Refresh <>ML/> Cancel

DisplayStyle: Toplevel

Browse: UniformSeries

Edit:

Name: Section

Title: set title "[node @Range]; [node @Title]"

Open when loaded:

Browse: Section

Edit:

DisplayStyle: Section

Insert Delete Duplicate Add a Child Add a Sibling Add saveNode script

Name: Series

Title: set title "[Format %5s [node @N1]]
set Fedname {}
foreach a { Historical
 Product

Open when loaded:

Browse: SeriesBrowse

Edit: SeriesEdit

DisplayStyle: Series

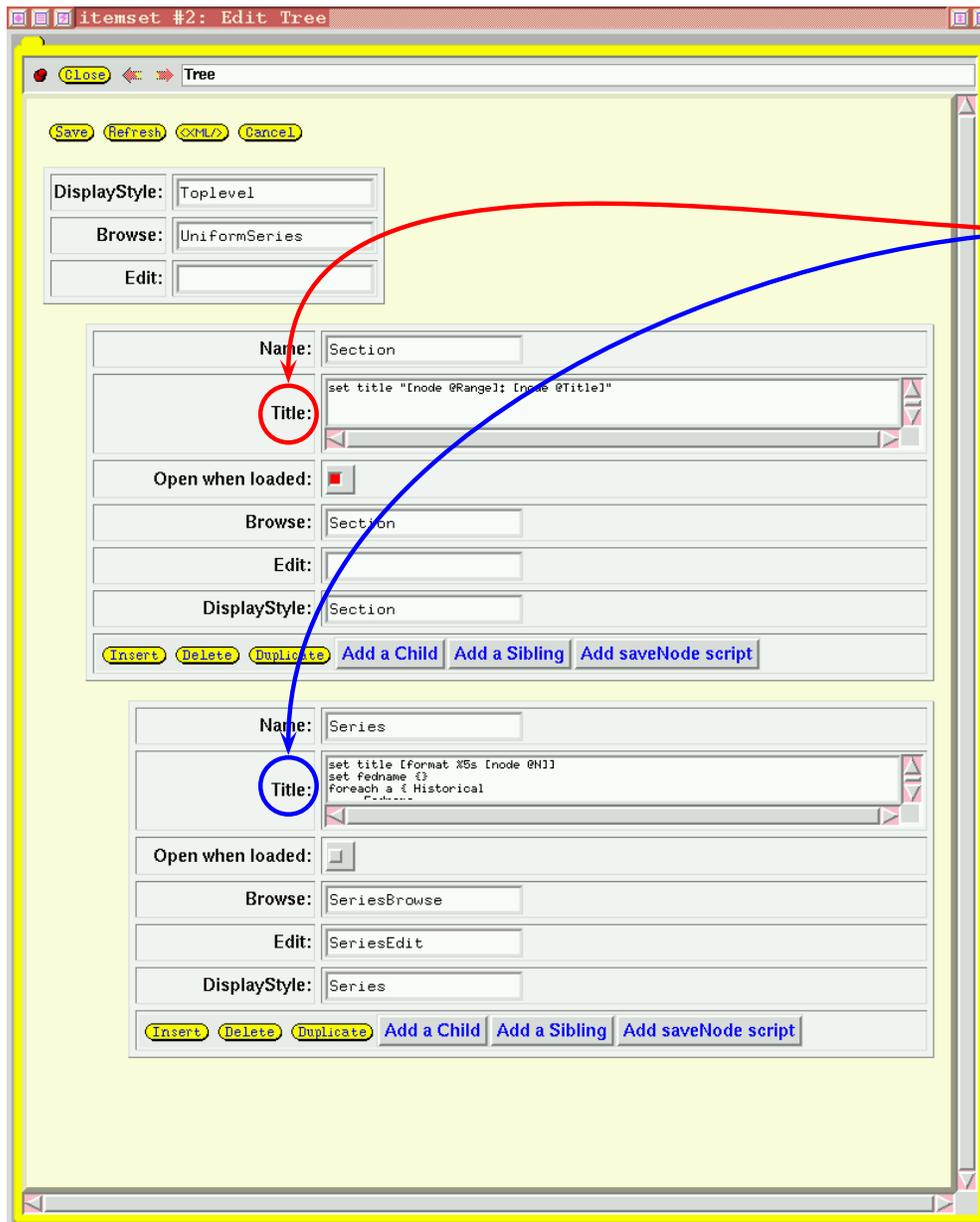
Insert Delete Duplicate Add a Child Add a Sibling Add saveNode script

“Name” of the element to be displayed in the Tree.

```
<Section Range="25000-39999" Title="Assets">  
  <Series N="25000" Fedname="STFBA">Total Assets  
    <Item Type="Formula" BeginDate="19840930" EndDate="99991231">  
      <Formula Depth="10">  
        <CAL f="+">25300</CAL>  
        <CAL f="+">37300</CAL>  
        <Alias> +STFBAI +STFBAN</Alias>  
      </Formula>  
    </Item>  
    <Note>RCFD2170</Note>  
  </Series>
```



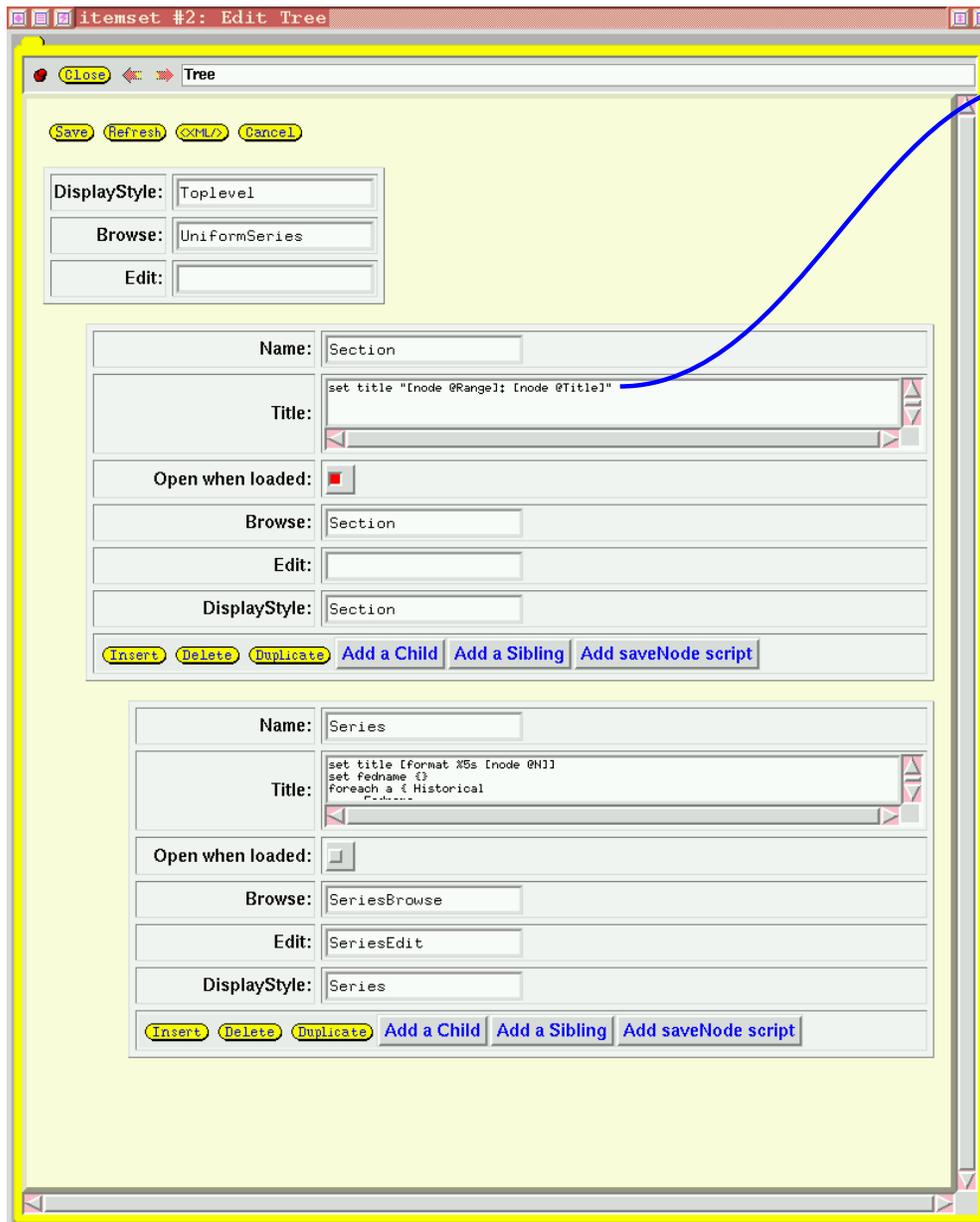
GUI Configuration



The "Title" contains Tcl code to create the Tree label.



GUI Configuration



set title "[node @Range]: [node @Title]"

This code is executed in a safe Tcl interpreter. The `node` command is aliased to a **tdom** node object.

The final value of *\$title* will be the label in the Tree.

```
<Section Range="25000-39999" Title="Assets">
  <Series N="25000" Fedname="STFBA">Total Assets
    <Item Type="Formula" BeginDate="19840930" EndDate="99991231">
      <Formula Depth="10">
        <CAL f="+">25300</CAL>
        <CAL f="+">37300</CAL>
        <Alias> +STFBAI +STFBAN</Alias>
      </Formula>
    </Item>
    <Note>RCFD2170</Note>
  </Series>
```



GUI Configuration

set title "[node @Range]: [node @Title]"

```
<Section Range="25000-39999" Title="Assets">
  <Series N="25000" Fedname="STFBA">Total Assets
    <Item Type="Formula" BeginDate="19840930" EndDate="99991231">
      <Formula Depth="10">
        <CAL f="+>25300</CAL>
        <CAL f="+>37300</CAL>
        <Alias> +STFBAI +STFBAN</Alias>
      </Formula>
    </Item>
    <Note>RCFD2170</Note>
  </Series>
```



GUI Configuration

itemset #2: Edit Tree

Close Tree

Save Refresh <>ML/> Cancel

DisplayStyle: Toplevel

Browse: UniformSeries

Edit:

Name: Section

Title: set title "[node @Range]; [node @Title]"

Open when loaded:

Browse: Section

Edit:

DisplayStyle: Section

Insert Delete Duplicate Add a Child Add a Sibling Add saveNode script

Name: Series

Title: set title [Format %5s [node @N1]]
set fedname {}
foreach a { Historical
 }

Open when loaded:

Browse: SeriesBrowse

Edit: SeriesEdit

DisplayStyle: Series

Insert Delete Duplicate Add a Child Add a Sibling Add saveNode script

“Browse” contains the name of a style sheet that is applied when selecting a node in the Tree.

25000 STFBA Total Assets

Edit

25000 STFBA Total Assets

Formula

Date: 1984/09-9999/12

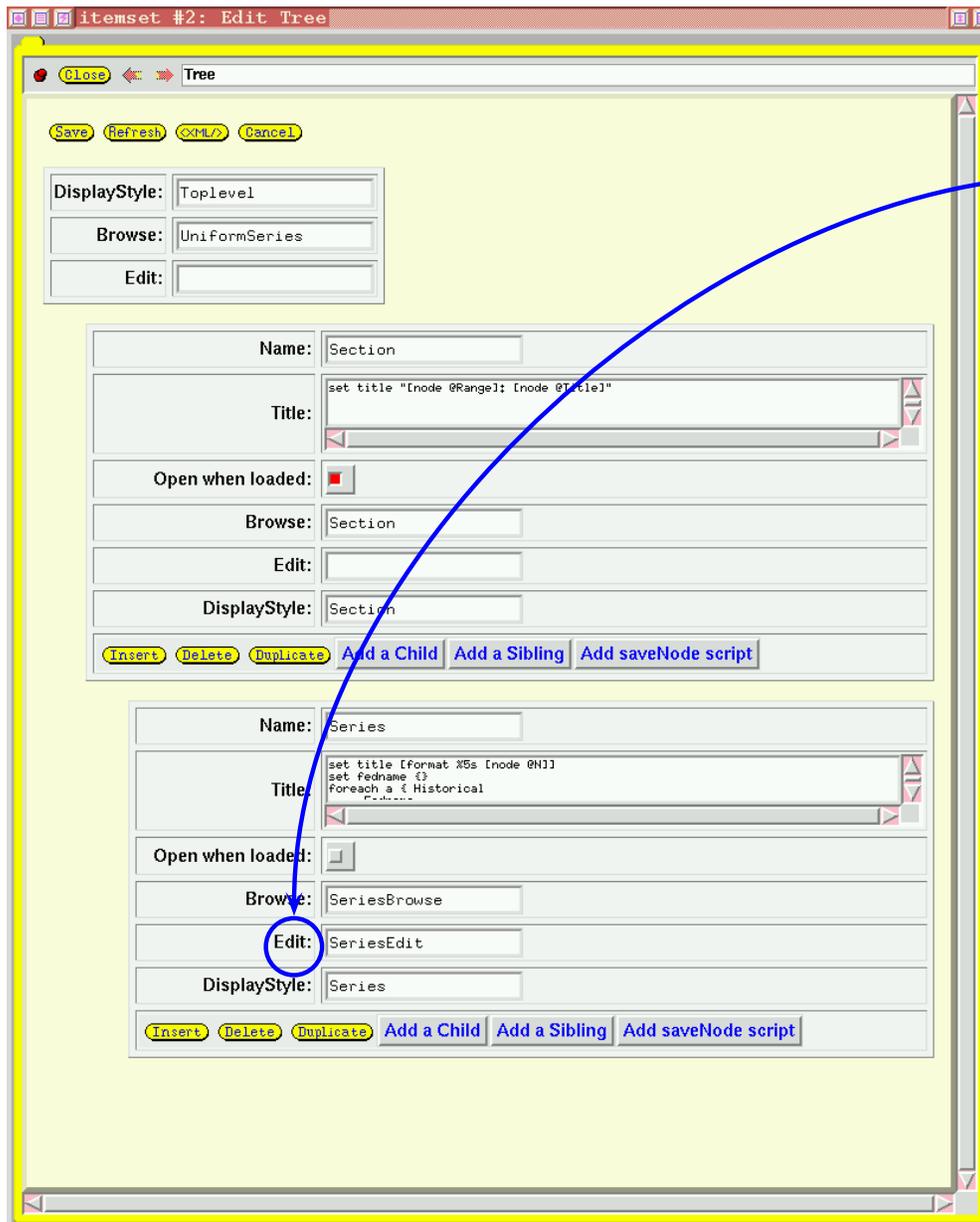
= +CAL25300+CAL37300 (Depth 10)

= +STFBAI +STFBAN

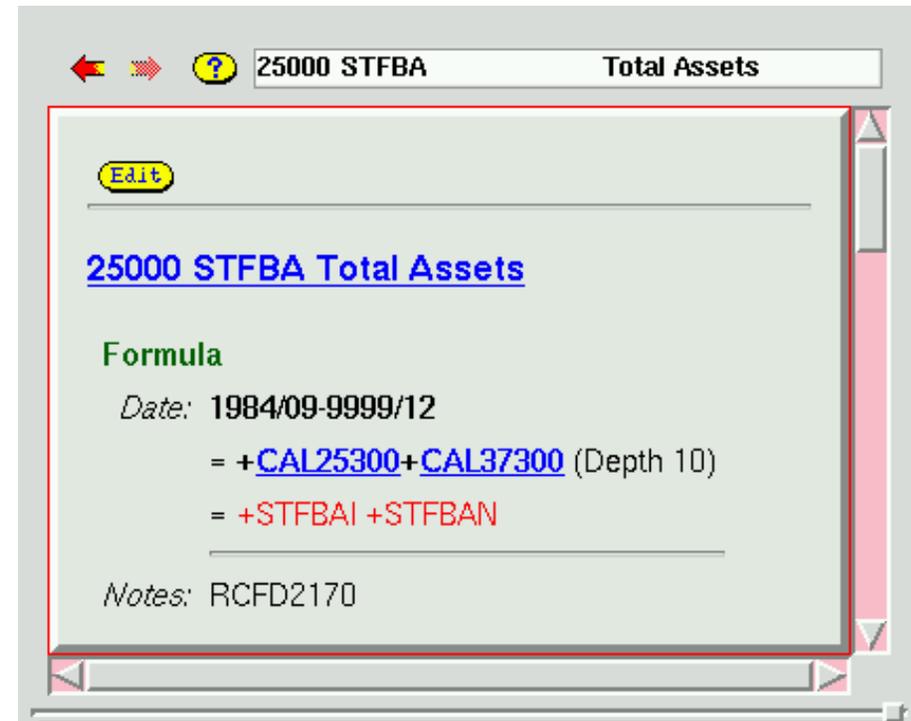
Notes: RCFD2170



GUI Configuration



“Edit” contains the name of a style sheet that is applied when the **Edit** button is pressed.





GUI Configuration

The screenshot shows the 'itemsct #2: Edit Tree' window. At the top, there are buttons for 'Close', 'Save', 'Refresh', '<>XML/>', and 'Cancel'. Below these are fields for 'DisplayStyle' (set to 'Toplevel'), 'Browse' (set to 'UniformSeries'), and 'Edit'. The main area contains two nodes:

- Section Node:**
 - Name: Section
 - Title: `set title "[node @Range]; [node @Title]"`
 - Open when loaded:
 - Browse: Section
 - Edit:
 - DisplayStyle: Section
- Series Node:**
 - Name: Series
 - Title: `set title [Format %5s [node @N1]]`
`set fedname {}`
`foreach a { Historical`
`Fedname`
 - Open when loaded:
 - Browse: SeriesBrowse
 - Edit: SeriesEdit
 - DisplayStyle: Series

At the bottom of each node configuration are buttons for 'Insert', 'Delete', 'Duplicate', 'Add a Child', 'Add a Sibling', and 'Add saveNode script'.

“DisplayStyle” contains the name of a **Tix** DisplayStyle object.



GUI Configuration

DisplayStyles control all font properties in the Tree.

itemset #2: Edit Tree

Close Tree

Save Refresh XML/ Cancel

DisplayStyle: Toplevel

Browse: UniformSeries

Edit:

Name: Section

Title: set title "[node @Range]; [node @Title]"

Open when loaded:

Browse: Section

Edit:

DisplayStyle: Section

Insert Delete Duplicate Add a Child Add a Sibling Add saveNode script

Name: Series

Title: set title [Format %5s [node @N1]]
set fedname {}
foreach a { Historical
 }

Open when loaded:

Browse: SeriesBrowse

Edit: SeriesEdit

DisplayStyle: Series

Insert Delete Duplicate Add a Child Add a Sibling Add saveNode script

itemset #2: Styles

Close Display Styles

Save Refresh XML/ Cancel

Style	Font	Foreground	Active Foreground	Select Foreground	
Toplevel	3 <input type="checkbox"/> fixed <input checked="" type="checkbox"/> bold <input type="checkbox"/> italic	black	black	black	
Section	3 <input type="checkbox"/> fixed <input type="checkbox"/> bold <input type="checkbox"/> italic	blue	blue	blue	
Series	2 <input type="checkbox"/> fixed <input type="checkbox"/> bold <input type="checkbox"/> italic	darkgreen	darkgreen	darkgreen	
domName	3 <input type="checkbox"/> fixed <input type="checkbox"/> bold <input type="checkbox"/> italic	brown	brown	brown	

Add a Style



Pane Layout

The screenshot shows the 'ItemSet V1.52 -- Production' application window. On the left is a tree view with categories like 'Fed Nomenclature Tree', 'Size Groups', 'Seasonal Adjustment', 'New Items', and 'FanXE Configuration'. The 'FanXE Configuration' section is expanded, showing various settings like 'CallIndex', 'UniformSeries', 'FedTree', etc. The main area displays an 'Options' dialog for configuring a pane layout. The dialog includes fields for 'Geometry' (1265x700+0-0) and 'Tearoff geometry'. The 'Pane Style' section shows a grid of pane configurations for P1, P2, and P3, with options for 'tree', 'view', and 'edit' actions. The 'Flip' option is set to 'no'. The 'Pane sizes (%)' are set to 30 and 50. Below the dialog is a 'Log' window showing the XML output of the configuration.

```
<Options>
  <geometry>1265x700+0-0</geometry>
  <tearoffGeometry/>
  <panes type="2" flip="no" p1="tree" p2="view" p3="edit" fractions="30 50"/>
  <helpURL/>
  <baseFont/>
  <option class="fixedFont">fixed</option>
</Options>
```



Pane Layout

The screenshot shows the 'ItemSet V1.52 -- Production' application window. On the left is a tree view of the project structure, including sections like 'Fed Nomenclature Tree', 'Size Groups', 'Seasonal Adjustment', 'New Items', and 'FanXE Configuration'. The 'FanXE Configuration' section is expanded, showing various settings like 'CallIndex', 'UniformSeries', 'FedTree', etc.

The main area displays the 'Options' dialog for configuring the pane layout. The dialog includes the following fields and controls:

- Geometry:** 1265x700+0-0
- Tearoff geometry:** (empty)
- Pane Style:** A grid of icons representing different pane layouts. A red circle highlights the top-right icon, which shows a 2x2 grid with P1, P2, P3 in the top row and P1, P3 in the bottom row.
- Flip:** A dropdown menu set to 'no'.
- P1:** tree view edit
- P2:** tree view edit
- P3:** tree view edit
- Pane sizes (%):** 30 50

Below the dialog, a yellow box shows the XML configuration for the selected pane style:

```
<Options>
  <geometry>1265x700+0-0</geometry>
  <tearoffGeometry/>
  <panes type="2" flip="no" p1="tree" p2="view" p3="edit" />
  <helpURL/>
  <baseFont/>
  <option class="fixedFont">fixed</option>
</Options>
```



Pane Layout

The screenshot displays the 'ItemSet V1.52 -- Production' application window. On the left is a tree view of the data structure, including categories like 'Fed Nomenclature Tree', 'Size Groups', 'Seasonal Adjustment', 'New Items', and 'FanXE Configuration'. The 'FanXE Configuration' section is expanded, showing various settings like 'CallIndex', 'UniformSeries', 'FedTree', etc.

The main area shows the 'Options' dialog box, which is used to configure the display of the XML data. The dialog includes the following fields and controls:

- Geometry:** 1265x700+0-0
- Tearoff geometry:** (empty)
- Pane Style:** A grid of icons representing different pane styles. The selected style is a 2x2 grid with labels P1, P2, P3 in the top row and P1, P3 in the bottom row.
- P1:** tree view edit
- P2:** tree view edit
- P3:** tree view edit
- Pane sizes (%):** 30 50
- Flip:** yes no

Below the dialog is a preview window showing the XML output. The XML code is as follows:

```
<Options>
  <geometry>1265x700+0-0</geometry>
  <tearoffGeometry/>
  <panes type="2" flip="no" p1="tree" p2="view" p3="edit" frac
  <helpURL/>
  <baseFont/>
  <option class="fixedFont">fixed</option>
</Options>
```



Pane Layout

The screenshot shows the 'ItemSet V1.52 -- Production' application window. On the left is a tree view of the project structure, including sections like 'Fed Nomenclature Tree', 'Size Groups', 'Seasonal Adjustment', 'New Items', and 'FanXE Configuration'. The 'Options' dialog is open in the center, showing configuration for three panes (P1, P2, P3). The 'Geometry' is set to '1265x700+0-0'. The 'Pane Style' section shows a 2x2 grid of pane icons. The 'P1' pane is set to 'tree', 'P2' to 'view', and 'P3' to 'edit'. The 'Pane sizes (%)' are set to '30 50'. The 'Flip' option is set to 'no'. Below the dialog, a yellow box shows the XML configuration for the 'Options' element, including geometry, pane types, and font settings. An orange arrow points from the 'view' button in the P2 pane style grid to the 'view' button in the P2 pane configuration list.

ItemSet V1.52 -- Production

File Edit [10:24:43] OK Exit

Search: Trim Search

Tree: Trim Search

Options

Save Refresh <XML> Cancel

Geometry: 1265x700+0-0

Tearoff geometry:

Pane Style:

P1: tree view edit

P2: tree view edit

P3: tree view edit

Pane sizes (%): 30 50

Flip: yes no

Log Close

XML

```
<Options>
  <geometry>1265x700+0-0</geometry>
  <tearoffGeometry/>
  <panes type="2" flip="no" p1="tree" p2="view" p3="edit" frac
  <helpURL/>
  <baseFont/>
  <option class="fixedFont">fixed</option>
</Options>
```



Pane Layout

ItemSet V1.52 -- Production

File Edit [10:24:43] OK Exit

Search: Trim Search

Tree: Trim Search

63000-64999: Maturity and repricing
65000-67399: Net charge-offs
67400-69699: Gross charge-offs
69700-71999: Recoveries
72000-74298: Delinquencies
74299-76599: Past-due 30 days or more
76600-78899: Nonaccrual
78900-79099: Renotiated (troubled) deb
79100-79999: Past-due 90 days or more
80000-89999: Off-balance sheet
90000-94999: Schedule-K Assets
95000-99999: Schedule-K Liabilities

Fed Nomenclature Tree
Size Groups
Seasonal Adjustment
New Items
FanXE Configuration
CallIndex -- Call Report Index
UniformSeries -- Uniform Item Set
FedTree -- Fed Nomenclature Tree
SizeGroups -- Size Groups
Seasonal -- Seasonal Adjustment
FailSA -- Series with no Seasonal
NewItems -- New Items
Fednames -- Fed Nomenclature Key:
bankname -- Bank Names*
district -- Districts*
fanxe -- FanXE Configuration
myPreferences -- User Preferences

Preferences
DisplayStyles
Options
User Preferences
DisplayStyles
Options

Options

Save Refresh <XML> Cancel

Geometry: 1265x700+0-0

Tearoff geometry:

Pane Style:

P1	P2	P3
P1	P2	P3

P1: tree view edit
P2: tree view edit
P3: tree view edit

Pane sizes (%): 30 30

Flip: yes no

Log Close

XML

```
<Options>  
<geometry>1265x700+0-0</geometry>  
<tearoffGeometry/>  
<panes type="2" flip="no" p1="tree" p2="view" p3="edit" frac  
<helpURL/>  
<baseFont/>  
<option class="fixedFont">fixed</option>  
</Options>
```



Special Links

The screenshot shows a software window with a title bar containing a back arrow, a right arrow, a question mark icon, and the text "25000 STFBA" and "Total Assets". Inside the window, there is an "Edit" button, a blue underlined link "25000 STFBA Total Assets", a green heading "Formula", a date field "Date: 1984/09-9999/12", a formula "= +CAL25300+CAL37300 (Depth 10)", another formula "= +STFBAI +STFBAN", and a notes field "Notes: RCFD2170".

← → ? 25000 STFBA Total Assets

Edit

[25000 STFBA Total Assets](#)

Formula

Date: 1984/09-9999/12

= +CAL25300+CAL37300 (Depth 10)

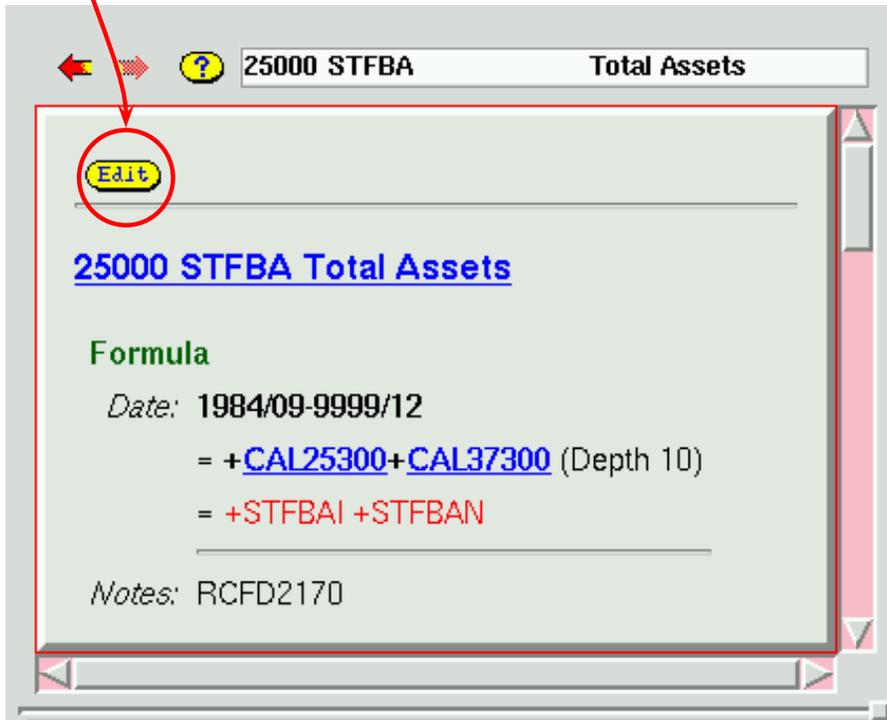
= +STFBAI +STFBAN

Notes: RCFD2170



Special Links

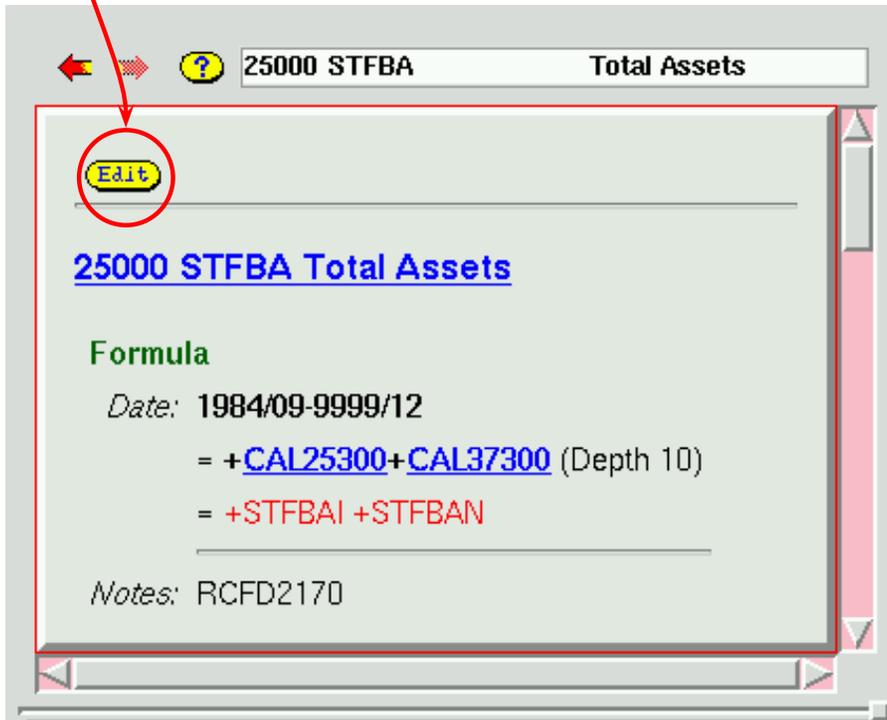
```
<input type="image" name="edit" src="http://FanXE/Edit" value="Edit">
```





Special Links

```
<input type="image" name="edit" src="http://FanXE/Edit" value="Edit">
```



The **FanXE** hostname links to internal images.



Special Links

``

25000 STFBA Total Assets

Formula

Date: 1984/09-9999/12

= +CAL25300+CAL37300 (Depth 10)

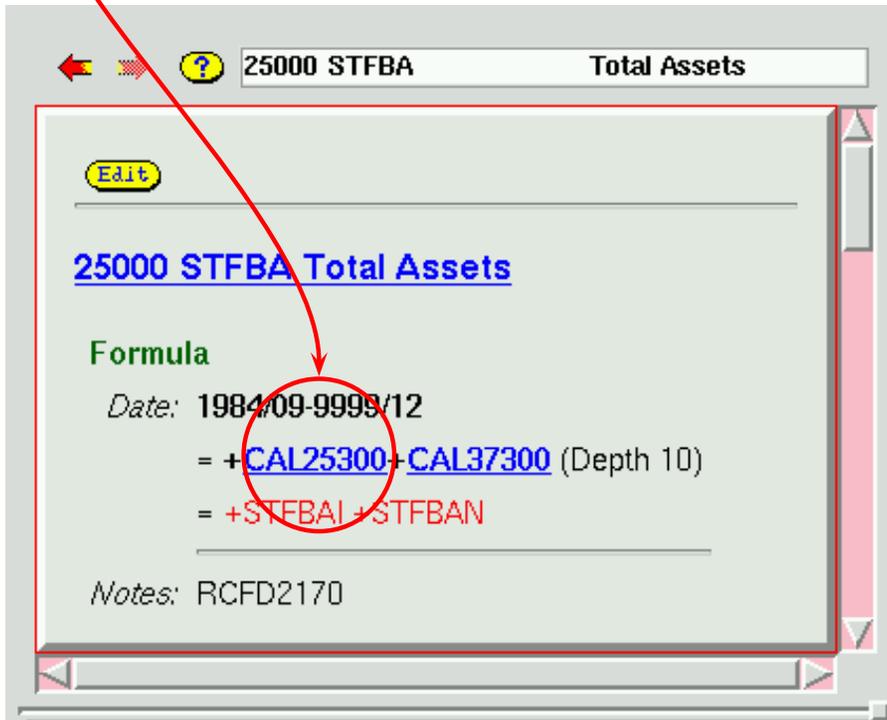
= +STFBAL+STFBAN

Notes: RCFD2170



Special Links

```
<a href="fanxe://UniformSeries//Series[@N='25300']">
```

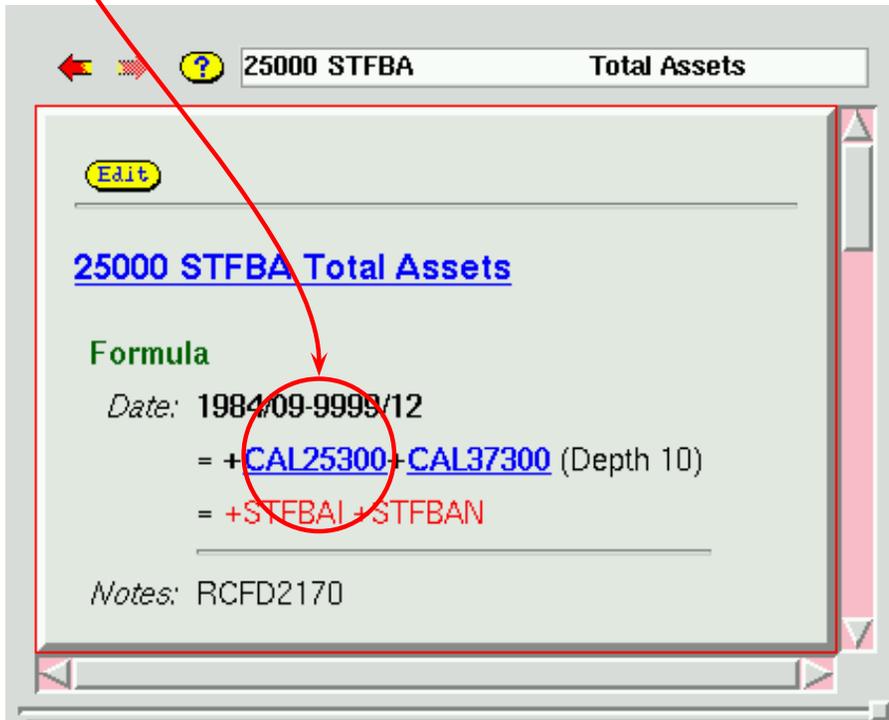


The **fanxe** URI scheme links to XPath expressions.



Special Links

```
<a href="fanxe://UniformSeries//Series[@N='25300']">
```



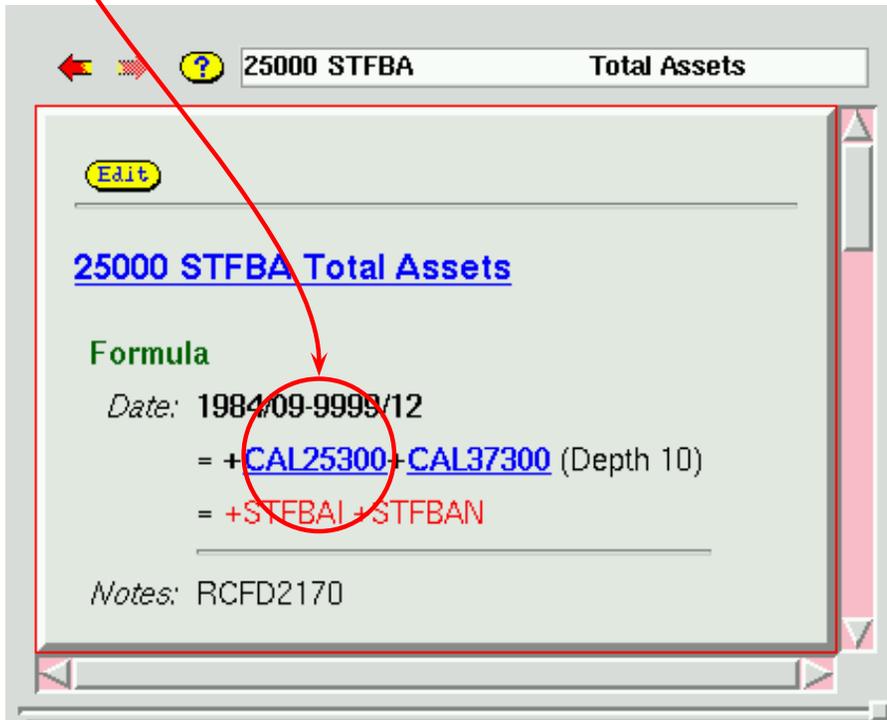
The **fanxe** URI scheme links to XPath expressions.

UniformSeries is the DOM name.



Special Links

```
<a href="fanxe://UniformSeries//Series[@N='25300']">
```



The **fanxe** URI scheme links to XPath expressions.

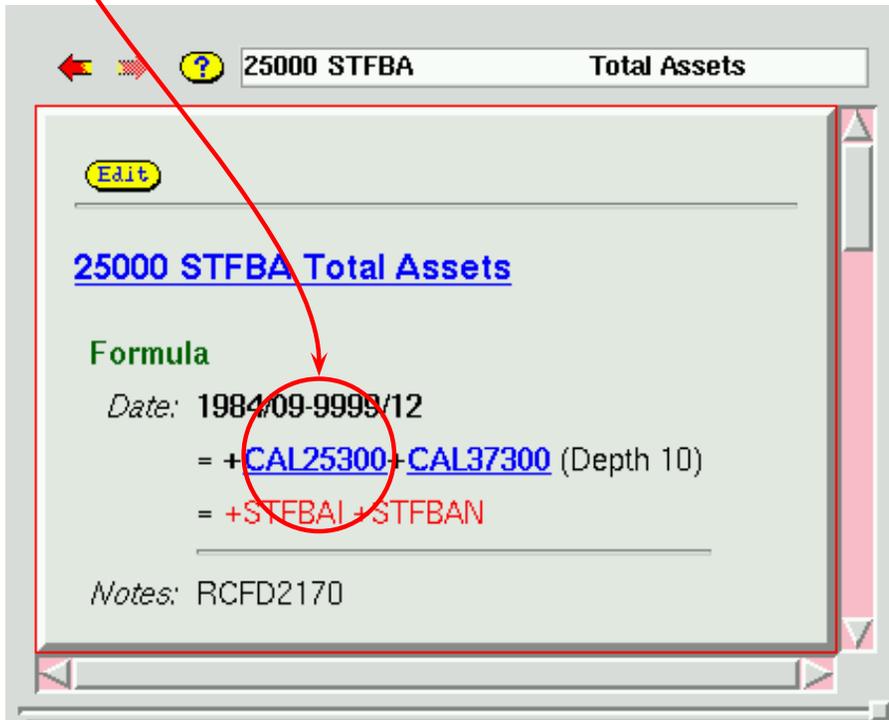
UniformSeries is the DOM name.

//Series[@N='25300'] is the XPath expression.



Special Links

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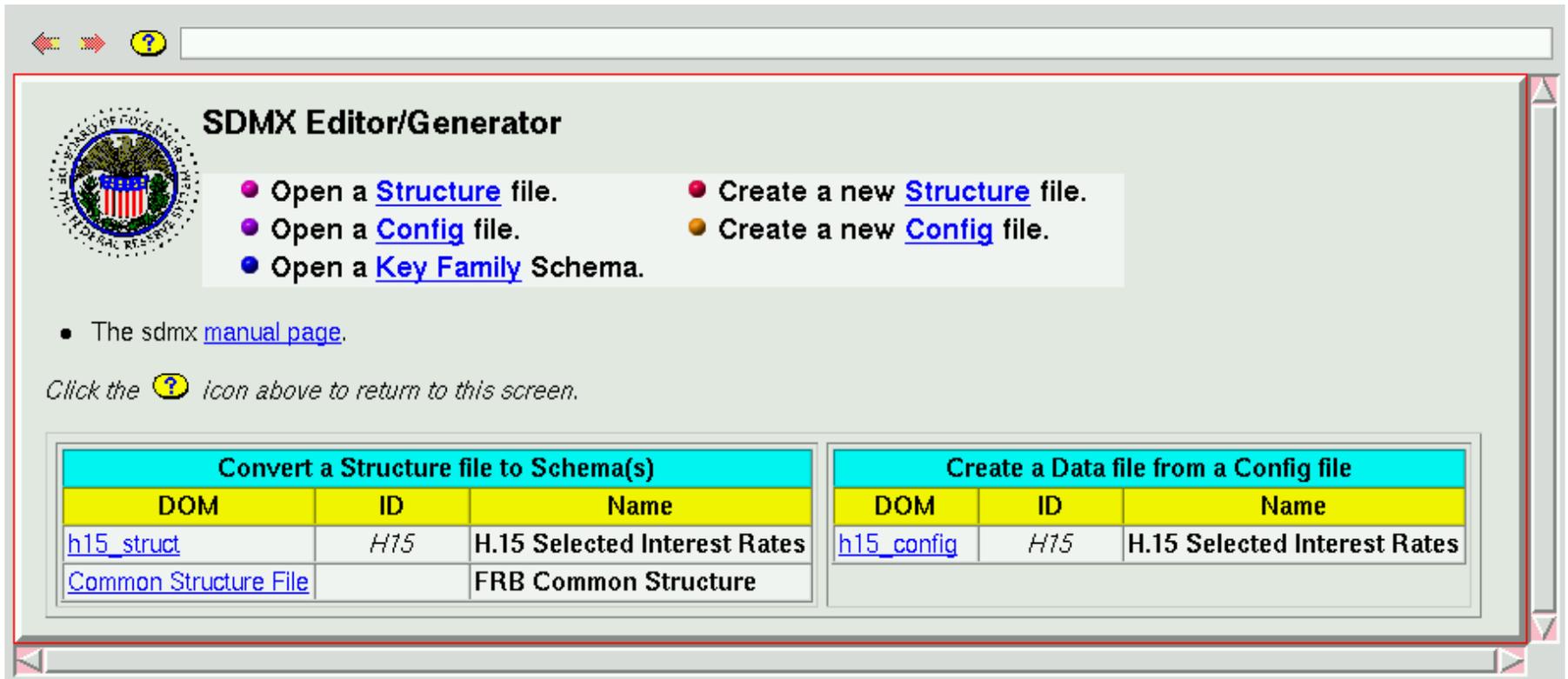
UniformSeries is the DOM name.

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If multiple nodes match the XPath, the first one is opened and others are highlighted. Middle-clicking opens the first 10 matches in new tabs.



Special Links



The screenshot shows the SDMX Editor/Generator interface. At the top left is the Federal Reserve logo. The main title is "SDMX Editor/Generator". Below the title are two columns of action items, each with a colored dot: a pink dot for "Open a Structure file.", a purple dot for "Open a Config file.", and a blue dot for "Open a Key Family Schema." in the left column; and a red dot for "Create a new Structure file." and an orange dot for "Create a new Config file." in the right column. Below these is a link to the "sdmx manual page." and a note about a question mark icon. At the bottom are two tables: "Convert a Structure file to Schema(s)" and "Create a Data file from a Config file".

SDMX Editor/Generator

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● The sdmx [manual page](#).

Click the  icon above to return to this screen.

Convert a Structure file to Schema(s)		
DOM	ID	Name
h15_struct	H15	H.15 Selected Interest Rates
Common Structure File		FRB Common Structure

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Special Links

``

The **FanXE** hostname
links to public methods.

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`build` is the method name.

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Special Links

```
<a href="http://FanXE/build?struct&h15_struct.xml">
```

`struct` and `h15_struct.xml` are the arguments to the method.

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Command Line Interface

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transform method

- Runs an XSLT transformation.



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 - Subclasses can add their own XSLT functions.



Application Examples

ItemSet: Report Form Meta Data

- Driving factor in motivation and design.



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- GUI listens for `tableUpdated` and changes are applied immediately.



Application Examples

SDMX: Time Series XML Data

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- Application front-end.
- Users open their own XML documents, not just what was defined in the configuration file.
- Files can be opened by cloning the structure of other XML documents defined in the configuration file.



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- Already using **[incr Tcl]** and the **iwidgets** panedwindow.



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 - A new version in the works?



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Availability

- <http://wklink.freeshell.org/>
- Not always up-to-date. Ask!
- Created as part of my work for the Federal Government.

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Thanks

- John Ousterhout for creating **Tcl/Tk**.
- Jeff Hobbes and the rest of the **Tcl/Tk** core team maintaining everything.
- Michael McLennan for **[incr Tcl]**.
- Jochen Löwer and Rolf Ade for **tdom**.
- D. Richard Hipp for **Tkhtml**.
- George Howlett for **BLT**.
- loi Lam for **Tix** (and others who have kept it working)
- Conference organizers.
- The entire community for providing answers whenever I've had questions.