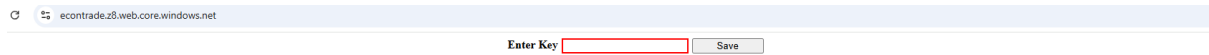


Tutorial to demo functionality

Step 1 : navigate to <https://econtrade.z8.web.core.windows.net/>

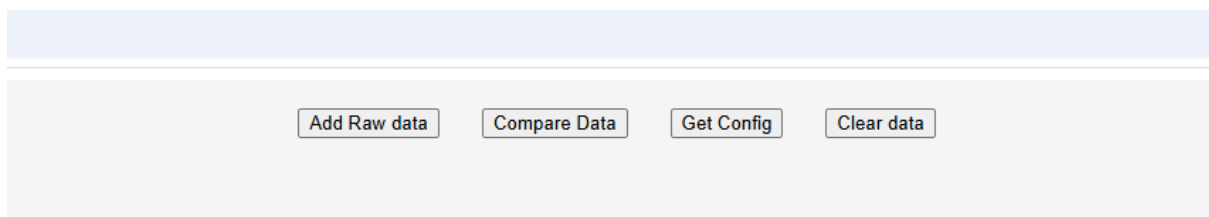
Step 2 : The UI will be as follows



The screenshot shows a web browser window with the address bar displaying 'econtrade.z8.web.core.windows.net'. Below the address bar, there is a form with the label 'Enter Key' followed by a text input field and a 'Save' button.

Step 3 : Enter the key to tradingeconomics and save

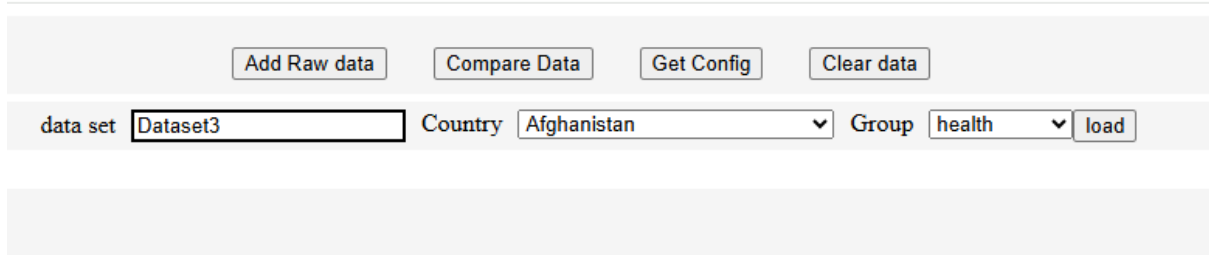
Step 4: The UI will be as follows



The screenshot shows a light gray background with four buttons arranged horizontally: 'Add Raw data', 'Compare Data', 'Get Config', and 'Clear data'.

Step 5 : Click on “Add Raw Data” The UI will be as follows

Set



The screenshot shows the UI after clicking 'Add Raw Data'. It features a light gray background with four buttons at the top: 'Add Raw data', 'Compare Data', 'Get Config', and 'Clear data'. Below these buttons, there are three input fields: 'data set' with the value 'Dataset3', 'Country' with a dropdown menu showing 'Afghanistan', and 'Group' with a dropdown menu showing 'health'. A 'load' button is positioned to the right of the 'Group' dropdown.

Step 6 : Enter the following values

data set => Mexico gdp

Country => Mexico (select from drop down)

Group => gdp (select from drop down)

Click load after a few seconds the following screen with data will show

<div><div>data set</div><div><div>Mexico</div><div>gdp</div></div><div>Country</div><div>Mexico</div><div>Group</div><div>gdp</div><div>load</div></div>													
Category	Title	LatestValueDate	LatestValue	Source	SourceURL	Unit	URL	CategoryGroup	Adjustment	Frequency	HistoricalDataSymbol	CreateDate	FirstValueDate
11 Year Growth	Mexico Full Year Gdp Growth	2024-12-31T00:00:00	1.5	Instituto Nacional de Estadística y Geografía (INEGI)	https://www.inegi.org.mx	percent	/mexico/full-year-gdp-growth	GDP	NSA	Yearly	MEXFYGG	2022-01-31T18:49:00	1994-12-31T00:00:00
Y	Mexico GDP	2024-12-31T00:00:00	1852.72	World Bank	https://www.worldbank.org	USD Billion	/mexico/gdp	GDP	Current USD	Yearly	WGDPMEXI	2014-07-03T15:32:00	1960-12-31T00:00:00
Y Aggregate Demand Q	Mexico GDP Aggregate Demand QoQ	2025-03-31T00:00:00	-1.1	Instituto Nacional de Estadística y Geografía (INEGI)	https://www.inegi.org.mx	percent	/mexico/gdp-aggregate-demand-qoq	GDP	SA	Quarterly	MEXGADQ	2021-11-03T13:25:00	1993-06-30T00:00:00
Y Aggregate Demand Y	Mexico GDP Aggregate Demand YoY	2025-03-31T00:00:00	-0.2	Instituto Nacional de Estadística y Geografía (INEGI)	https://www.inegi.org.mx	percent	/mexico/gdp-aggregate-demand-yoy	GDP	NSA	Quarterly	MEXGADY	2021-11-03T13:29:00	1994-03-31T00:00:00
Y Annual Growth Rate	Mexico GDP Annual Growth Rate	2025-06-30T00:00:00		Instituto Nacional de Estadística y Geografía (INEGI)	https://www.inegi.org.mx	percent	/mexico/gdp-growth-annual	GDP	NSA	Quarterly	MXGCTOT	2013-08-20T17:41:00	1994-03-31T00:00:00
<div><div>5</div><div>▼</div><div>1</div><div>2</div><div>3</div><div>4</div></div>													
<div><div>data set</div><div><div>Dataset4</div></div><div>Country</div><div>Afghanistan</div><div>Group</div><div>health</div><div>load</div></div>													

Step 8 for the second data set make the following selection

data set => NZ gdp

Country => New Zealand (select from drop down)

Group => gdp (select from drop down)

https://www.inegi.org.mx	percent	/mexico/gdp-growth-annual	GDP	NSA	Quarterly	MXGCTOT
--------------------------	---------	---------------------------	-----	-----	-----------	---------

5 ▾ 1 2 3 4

data set Country ▾ Group ▾

Step 9 :Click on Load NZ gdp data will load

		Geografía (INEGI)		percent	/mexico/gdp-growth-annual	GDP	NSA	Quarterly	MXGCTOT	03T13:29:00	31T00:00:00
		Instituto Nacional de Estadística y Geografía (INEGI)	https://www.inegi.org.mx	percent	/mexico/gdp-growth-annual	GDP	NSA	Quarterly	MXGCTOT	2013-08-20T17:41:00	1994-03-31T00:00:00

5 ▾ 1 2 3 4

data set <input type="text" value="NZ gdp"/>		Country <input type="text" value="New Zealand"/>		Group <input type="text" value="gdp"/>		<input type="button" value="load"/>	
--	--	--	--	--	--	-------------------------------------	--

Date	LatestValue	Source	SourceURL	Unit	URL	CategoryGroup	Adjustment	Frequency	HistoricalDataSymbol	CreateDate	FirstValue
	-0.5	Statistics New Zealand	https://www.stats.govt.nz/	percent	/new-zealand/full-year-gdp-growth	GDP	NSA	Yearly	NZLFYGG	2022-11-28T15:06:00	1988-12-31T00:00:00
	260.24	World Bank	https://www.worldbank.org/	USD Billion	/new-zealand/gdp	GDP	Current USD	Yearly	WGDNEWZ	2014-07-03T15:36:00	1960-12-31T00:00:00
	-0.7	Statistics New Zealand	https://www.stats.govt.nz/	percent	/new-zealand/gdp-growth-annual	GDP		Quarterly	NZNTGDPY	2013-06-20T14:35:00	1987-06-30T00:00:00
	72398	Statistics New Zealand	https://www.stats.govt.nz/	NZD Million	/new-zealand/gdp-constant-prices	GDP	Constant Prices 2009-2010, SA	Quarterly	NEWZEALANGDPCONPRI	2013-07-19T14:19:00	1987-06-30T00:00:00
	3779	Statistics New Zealand	https://www.stats.govt.nz/	NZD Million	/new-zealand/gdp-from-agriculture	GDP	Constant Prices 2009-2010, SA	Quarterly	NEWZEALANGDPFROAGR	2015-08-24T11:27:00	1987-06-30T00:00:00

5 ▾ 1 2 3 4

Step 10: Click on Compare Data on the top tool bar . The following form will show

New Zealand	https://www.stats.govt.nz/	NZD Million	zealand/gdp-constant-prices	GDP	Prices 2009-2010, SA	Quarterly	NEWZEALANGDPCONPRI	2015-07-19T14:19:00
Statistics New Zealand	https://www.stats.govt.nz/	NZD Million	/new-zealand/gdp-from-agriculture	GDP	Constant Prices 2009-2010, SA	Quarterly	NEWZEALANGDPFROAGR	2015-08-24T11:27:00

5 ▾ 1 2 3 4

Comparison1

☒ Set Innit Script


```

// if needed add global variables here
var innitef4ebafac9db445f86156d1c1483dbf2 = function(compareObj){
    //if needed write a script to innitialise data. Do not change function name
}
        
```

compare data set
 select data set

☒ Filter Rows


```

var filter652192c8014d45a38f2ee914fb70ceec = function(ds){
    // write a script to filter out rows and return the filtered dataset. Do not change function name
    name
}
        
```

This field is the key field. The value of this field will be used to match with the corresponding key fields in the data sets that are to be compared.

Step 10 : Enter as follows

Replace Comparison1 with Mexico VS NZ

Keep Set Innit Script checked and for the script box below enter the following

Below // if needed add global variables here

Enter

```
var keyvalues = undefined;
var keyValueIndex = 0;
```

inside the function below

//if needed write a script to innitialise data. Do not change function name

Enter

```
keyvalues = new Object();
keyValueIndex = 0;
```

It should look like this, please note the function name will be different

Mexico VS NZ

☒ Set Innit Script

```
// if needed add global variables here
var keyvalues = undefined;
var keyvalueIndex = 0;
var innitef4ebafac9db445f86156d1c1483dbf2 = function(compareObj){
  //if needed write a script to initialise data. Do not change function name
  keyvalues = new Object();
  keyvalueIndex = 0;
}
```

compare data set select data set

Step 11

In the compare data set input box replace CompareDataSet1 with Mexico

Keep the Filter Rows Check and inside the text area below // write a script to filter out rows and return the filtered dataset. Do not change function name

Enter the following code to filter a data set that does excludes missing values and has units of percent

```
return ds.filter(gdp => gdp.Unit === 'percent' && gdp.LatestValue &&
gdp.LatestValue !== '');
```

compare data set select data set

☒ Filter Rows

```
var filter652192c8014d45a38f2ee914fb70ceec = function(ds){
  // write a script to filter out rows and return the filtered dataset. Do not change function name
  return ds.filter(gdp => gdp.Unit === 'percent' && gdp.LatestValue && gdp.LatestValue !== '');
}
```

Step 12

Next the computation or selection of fields to compare.

Replace fld0 with Key => this field will be computed to have a unique key based on the combination of fields

In the radio selection select Compute field this will open a text area to enter code

Enter the following code below //write code to return field value. Do not change function name

```
let parts = row.LatestValueDate.split('-');
let key = GetAlphaNumeric(parts[0] + parts[1] + row.Category);
if (!keyvalues[key]) {
    keyvalues[key] = ++keyvalueIndex;
}
return keyvalues[key];
```

It should now look as follows:

Key

This field is the key field. The value of this field will be used to match with the corresponding key fields in the data sets that are to be compared.

Select field set option

☐ Select a field

☒ Compute field

```
var computefld9938fe304ac74dcca7d4f7798dfd6c98 = function(row){
    //write code to return field value. Do not change function name
    let parts = row.LatestValueDate.split('-');
    let key = GetAlphaNumeric(parts[0] + parts[1] + row.Category);
    if (!keyvalues[key]) {
        keyvalues[key] = ++keyvalueIndex;
    }
    return keyvalues[key];
}
```

fld1

Step 13

Replace fld1 with Date Category. Select Compute field in the radio group.

Enter the following code in the text area below

```
let parts = row.LatestValueDate.split('-');
return parts[0] + parts[1] + ' ' + row.Category;
```

It should now look as follows

Date Category

This field has an index of 1. The value of this field will be compared with the field with the same index in the other datasets to be compared.

Select field set option

☐ Select a field

☒ Compute field

```
var computefldda0935ea42424e4b83b3184a24ec0423 = function(row){
    //write code to return field value. Do not change function name
    let parts = row.LatestValueDate.split('-');
    return parts[0] + parts[1] + ' ' + row.Category;
}
```

Add Field

Generate Data Set

Step 14

Click on Add Field and replace fld2 with GDP. Keep the radio as select a field. In the field select data set fields drop down select LatestValue

It should now look as follows

GDP

This field has an index of 2. The value of this field will be compared with the field with the same index in the other datasets to be compared.

Select field set option

☒ Select a field
☐ Compute field

select data set field LatestValue

Add Field

Generate Data Set

Step 15

Click on Generate Data Set, this will create the DataSet. It will show as follows

Key	Date Category	GDP
1	202412 Full Year GDP Growth	1.5
2	202503 GDP Aggregate Demand QoQ	-1.1
3	202503 GDP Aggregate Demand YoY	-0.2
4	202506 GDP Growth Rate	0.6
5	202506 Monthly GDP MoM	0.2

5 1 2

Step 16

Repeat steps 11 to step 15 for the data entry section following the above except in step 11

Replace CompareDataSet2 with NZ and select NZ gdp

2	202503 GDP Aggregate Demand QoQ	-1.1
3	202503 GDP Aggregate Demand YoY	-0.2
4	202506 GDP Growth Rate	0.6
5	202506 Monthly GDP MoM	0.2

5

1

2

compare data set

select data set

☒ Filter Rows

```
var filter495f08ccda1a4d2bb2810bd81135f731 = function(ds){  
    // write a script to filter out rows and return the filtered dataset. Do not change function
```

Once all the data is entered it should look as follows

Tutorial 2

Clicking Get Config on the top tool bar will open a text Area with the setting for all the entries made in tute 1 as follows.

Add Raw data

Compare Data

Get Config

Clear data

```
{  
  "rawdataRequest":  
  {  
    "id": "45a58a78c5ec411bb9b9d49354ae2986", "country": "Mexico", "group": "gdp", "dataset": "Mexico gdp",  
    [{"id": "8bf785d2b24c44d99835f783c7a1b37a", "country": "New Zealand", "group": "gdp", "dataset": "NZ  
gdp"}], "compareObject": [{"id": "ef4ebafac9db445f86156d1c1483dbf2", "setInnitScript": true, "innitScript": "\n  
// if needed add global variables here\nvar keyvalues = undefined;\nvar keyvalueIndex = 0;\nvar  
innitef4ebafac9db445f86156d1c1483dbf2 = function(compareObj){\n    //if needed write a script to  
initialise data. Do not change function name\n    keyvalues = new Object();\n    keyvalueIndex = 0;\n    }\n  }, "title": "Mexico VS NZ", "datasets":  
  {  
    [{"id": "652192c8014d45a38f2ee914fb70ceec", "parentid": "ef4ebafac9db445f86156d1c1483dbf2", "setFilter": true  
    , "filter": "var filter652192c8014d45a38f2ee914fb70ceec = function(ds){\n    // write a script to  
filter out rows and return the filtered dataset. Do not change function name\n    return ds.filter(gdp =>  
gdp.Unit === 'percent' && gdp.LatestValue && gdp.LatestValue !== '' );\n    }", "fieldCount": 3, "datasetid": "45a58a78c5ec411bb9b9d49354ae2986", "name": "Mexico", "fields":  
    {  
      [{"id": "9938fe304ac74dcca7d4f7798dfdc98", "parentid": "652192c8014d45a38f2ee914fb70ceec", "setmethod": "2",  
      "index": 0, "title": "Key", "name": "Country", "script": "var computefld9938fe304ac74dcca7d4f7798dfdc98 =  
function(row){\n    //write code to return field value. Do not change function name\n    let  
parts = row.LatestValueDate.split('-');\n    let key = GetAlphaNumeric(parts[0] + parts[1] +  
row.Category);\n    if (!keyvalues[key]) {\n    keyvalues[key] = ++keyvalueIndex;\n    }\n    return  
keyvalues[key];\n    }\n    },  
    {"id": "da0935ea42424e4b83b3184a24ec0423", "parentid": "652192c8014d45a38f2ee914fb70ceec", "setmethod": "2", "  
index": 1, "title": "Date Category", "name": "Country", "script": "var  
computefldda0935ea42424e4b83b3184a24ec0423 = function(row){\n    //write code to return field  
value. Do not change function name\n    let parts = row.LatestValueDate.split('-');\n    return parts[0]  
+ parts[1] + ' ' + row.Category;\n    }\n    },  
    {"id": "f8b7a3043af84092b4537a182d3bbf4", "parentid": "652192c8014d45a38f2ee914fb70ceec", "setmethod": "1", "  
index": 2, "title": "GDP", "name": "LatestValue"}] }  
}
```

data set Country Group

By copying the setting and opening a fresh browser in another computer or browser type, entering the Key and subsequently clicking on Get Config in the new Browser window and pasting the above and clicking Run will reproduce the work in the new browser. This is the means to share data.

4	202506 GDP Growth Rate	0.6
5	202506 Monthly GDP MoM	0.2

5
1
2

compare data set
NZ
select data set
NZ gdp

☒ Filter Rows

```

var filter495f88ccda1a4d2bb2810bd81135f731 = function(ds){
  // write a script to filter out rows and return the filtered dataset. Do not change function name
  return ds.filter(gdp => gdp.Unit === 'percent' && gdp.LatestValue && gdp.LatestValue !== '');
}

```

Key

This field is the key field. The value of this field will be used to match with the corresponding key fields in the data sets that are to be compared.

Select field set option
☐ Select a field
☒ Compute field

```

var computefldd3bfe38b5f694f738c6892dd41052cf0 = function(row){
  //write code to return field value. Do not change function name
  let parts = row.LatestValueDate.split('-');
  let key = getAlphanumeric(parts[0] + parts[1] + row.Category);
  if (!keyvalues[key]) {
    keyvalues[key] = ++keyvalueIndex;
  }
  return keyvalues[key];
}

```

Date Category

This field has an index of 1. The value of this field will be compared with the field with the same index in the other datasets to be compared.

Select field set option
☐ Select a field
☒ Compute field

```

var computefld7bf206fdd42a4d96b53d561364e88410 = function(row){
  //write code to return field value. Do not change function name
  let parts = row.LatestValueDate.split('-');
  return parts[0] + parts[1] + row.Category;
}

```

GDP

This field has an index of 2. The value of this field will be compared with the field with the same index in the other datasets to be compared.

Select field set option
☒ Select a field
☐ Compute field

select data set field
LatestValue

Add Field

Generate Data Set

Step 17 click Generate Data Set for NZ. It will show as follows

Add Field

Generate Data Set

Key	Date Category	GDP
1	202412 Full Year GDP Growth	-0.5
2	202503 GDP Annual Growth Rate	-0.7
3	202503 GDP Growth Rate	0.8

5
1

Add DataSet

Generate Comparison

Step 18 Click on Generate Comparison on lower left corner it should produce the following Grid comparing Mexico vs NZ data sets generated above

Generate Comparison					
Mexico	NZ	Mexico	NZ	Mexico	NZ
Key	Key	Date Category	Date Category	GDP	GDP
1	1	202412 Full Year GDP Growth	202412 Full Year GDP Growth	1.5	-0.5
2		202503 GDP Aggregate Demand QoQ		-1.1	
3		202503 GDP Aggregate Demand YoY		-0.2	
4		202506 GDP Growth Rate		0.6	
5		202506 Monthly GDP MoM		0.2	

Step 16 In this step a script will be added to generate a bar chart. Click on add run script on lower left corner

In the code area below //Do not change function name

Enter the following code

```

let obj = new Object();
obj.tagType = "svg";
obj.attributes = new Object();
obj.strokewidth = "1";
var gid = GuidIDStr();
var section = new Object();
section.tagType = "section";
section.attributes = [];
var attr = new Object();
attr.name = 'id';
attr.value = 'section' + gid;
section.attributes.push(attr);
obj.elem = createHtmlElement(section);
// mainElem = document.getElementById("main");
scriptElem.append(obj.elem);
let svgroot = document.getElementById("svgroot");
if (svgroot) {
    svgroot.remove();
}
obj.attributes.parentId = gid;
obj.attributes.id = "svgroot";
obj.attributes.version = "2";
obj.attributes.stroke = "black";
obj.attributes.width = "100%";
obj.attributes.height = "450";

createSVGTag(obj);
createGtag();
createXaxis(400, 40, 0, 266, ["1", "2", "3", "4", "5", "6", "7", "8", "9",
"10"], 20);
createYaxis(400, 40, 0, 0, getLegendsArray(-1, 2), -30);
let items = compareobj.items;
let maxicoData = [];
let nzData = [];
items.forEach(item => {
    let maxObj = new Object();
    maxObj.x = item.Mexicokey * 40;
    maxObj.y = item["Mexicogdp"] * 133;
    maxObj.w = 10;

```

```

    maxObj.xoffset = -10;
    maxicoData.push(maxObj);
    let nzObj = new Object();
    nzObj.x = item.NZkey * 40;
    nzObj.y = item["NZgdp"] * 133;
    nzObj.w = 10;
    nzObj.xoffset = 0;
    nzData.push(nzObj);
  });

  barChart(maxicoData, "red");
  barChart(nzData, "blue");
  let gtagElem = document.getElementById('gtag')
  gtagElem.setAttribute("transform", "translate(60,0)");
  obj = new Object();
  obj.elem = document.getElementById('gtag');
  obj.tagType = "rect";
  obj.attributes = new Object();
  obj.attributes.x = 340;
  obj.attributes.y = 40;
  obj.attributes.width = 10;
  obj.attributes.height = 10;
  obj.attributes.fill = "red";
  createSVGTag(obj);
  createSVGText(380, 45, "Mexico", "gtag")
  obj = new Object();
  obj.elem = document.getElementById('gtag');
  obj.tagType = "rect";
  obj.attributes = new Object();
  obj.attributes.x = 340;
  obj.attributes.y = 25;
  obj.attributes.width = 10;
  obj.attributes.height = 10;
  obj.attributes.fill = "blue";
  createSVGTag(obj);
  createSVGText(380, 30, "NZ", "gtag");

```

Click on Run it should result in the following bar chart

}

run

