



Faça Fácil Proficy Historian - Armazenamento de Alarmes e Eventos

Objetivos:

Armazenar Alarmes e eventos do iFIX no Proficy Historian

Pré-Requisitos:

Conhecer os princípios básicos de configuração do Proficy iFix. Ter conhecimento da ferramenta de Administração do Proficy Historian

Para utilizar o exemplo de consulta no Proficy Historian:

Você deve ter um Servidor do Proficy Historian com Alarm Archiver Instalado e um Servidor SCADA iFIX.

Para esse faça fácil estamos utilizando 2 servidores:

- 1) Servidor Proficy Historian 4.5, previamente instalado com a opção Alarme Archiver, denominado "CURSO21"
- 2) Servidor SCADA iFIX 5.5, configurado com o nome de nó "TESTE" e nome de máquina "CURSO27"

Configuração:

1) Instale o coletor "iFIX Alarm Collector", utilizando o CD de instalação do Proficy Historian, conforme a imagem abaixo:

Proficy Historian Setup Maintenance	×
Select Features Select the features setup will install.	
Check new components you want to install or unch	Description
Historian Server Alarm and Event Archiver	HIX Collector connects the Historian to an iFIX node.
Collectors Calculation Collector File Collector	
iFIX Alarm Collector UPC Collector	<u>•</u>
776.00 KB of space required on the C drive 49799420.00 KB of space available on the C drive InstallShield	
	< <u>B</u> ack <u>N</u> ext > Cancel

2) Informe do Servidor Historian quando solicitado:



Proficy Histo	rian Setup M	aintenance			×
Historian Se	erver Name				N2A
Enter the Hi	istorian Server to I	be used as the d	efault for Excel A	vdd-in.	
Name	CURS021				
InstallShield					
			< <u>B</u> ack	<u>N</u> ext >	Cancel

- 3) Duas vezes, click no botão "Next" para concluir a instalação.
- Abra o "SCU" (System Configuration) do iFIX.
 Em "Task Configuration", inclua duas tarefas:
- - a. iFixOPCAESrv.exe
 - b. ihiFixAECollector.exe, com parâmetro NOSERVICE.

Task Configura	tion	? ×
<u>F</u> ilename:	C:\PROGRAM FILES\PROFICY\PROFIC	Start Up Mode
Command <u>L</u> ine:	NOSERVICE	Normal Background
Configured Task % C:\PROGRAM	s: 4 FILES\PROFICY\PROFICY IFIX\IOCNTRL.EXE	
% C:\PROGRAM % C:\Program File C:\Program File % C:\PROGRAM	4 FILES\PROFICY\PROFICY IFIX\WSACTASK.E les\Proficy\Proficy iFIX\SUMQDEL.EXE -D05:00 es\Proficy\Proficy iFIX\WORKSPACE.EXE	
% C:\PROGRAM	A FILES (PROFICY) PROFICY IFIX (IHIFIXAECOLL	•
J		Delete
	<u>D</u> K <u>Cancel Help</u>	

- 6) Inicie o iFIX.
- 7) Observe que o Servidor OPC AE do iFIX é iniciado:



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Value	
1000	
1	
1	
1	
216	
185	
19	
	Value 1000 1 1 1 216 185 19

8) Pelo Servidor do Historian, utilizando o "Adminstrator" é possível verificar que o coletor também está rodando:



Pronto!! Os alarmes já estão sendo armazenados!



Exemplos de Consulta

Pelo Adminstrator do Historian:

- 1) Abra a ferramenta de administração do Historian.
- 2) Selecione "Collectors", e em seguida o coletor de Alarmes e Eventos

📾 Proficy Historian Administrator on [CU	RS021]	_ 🗆 🗙
Proficy* Historian Collector Maintenance	എ <u>Main</u> എTags ന <u>് Collectors</u> 鏱 <u>Archives</u> 🖅 <u>Messages</u>	About ②Help
Collectors Name Computer CURS021_Calculation Curso21 CURS021_File CURS021 CURS021_Simulation Curso21 CURS027_if=xAE Curso27	Collector: CURSO27_iFixAE General Configuration Tags Advanced Performance Redundancy Collector Specific Configuration (OPCAE) OPC Server PROGID Proficy.OPCiFIXAE.1 Link to Data Collector CURSO27_iFIX Filtering O Disabled C Enabled Filters Show Last Alarms Close Alarms Vendor Attributes All Selected Add R Recalculate Add Tags Update	- iemove Delete

3) Pressione o botão "Show Last Alarms", a seguinte tela será apresentada com os últimos alarmes e eventos gerados pelo iFIX:



😂, Sh	ow Alarms/Event	s					- 🗆 X
Last A	larms						
D	Source	Start Time	End Time	Condition	Sub Condition	Event Catego	ory 🔺
	TESTE.MBE_10	2/9/2012 3:21:18 PM	12:00:00 AM	Tag	LOLO	Tag	
	TESTE.MBE_10	2/9/2012 3:20:34 PM	2/9/2012 3:20:45 PM	Tag	ОК	Tag	
	TESTE.MBE_8_3	2/9/2012 3:20:14 PM	2/9/2012 3:20:23 PM	Tag	OK	Tag	
	TESTE.MBE_8_5	2/9/2012 3:20:14 PM	2/9/2012 3:20:23 PM	Tag	OK	Tag	
	TESTE.MBE_8_8	2/9/2012 3:20:14 PM	2/9/2012 3:20:23 PM	Tag	OK	Tag	
	TESTE.MBE_8_7	2/9/2012 3:20:14 PM	2/9/2012 3:20:23 PM	Tag	OK	Tag	
	TESTE.MBE_8	2/9/2012 3:20:14 PM	2/9/2012 3:20:23 PM	Tag	OK	Tag	
	TESTE.MBE_8	2/9/2012 3:20:14 PM	2/9/2012 3:20:23 PM	Tag	OK	Tag	
	TESTE MBE_8_1	2/9/2012 3:20:14 PM	2/9/2012 3:20:23 PM	lag T	UK	lag T	-
	IFSTEMBE 8 Z	2/9/2012.3/2014 PM	2/9/2012.3/20/23 PM	Lan		Lan	
Last E	vents						
Desc	ription		Source	Time Stamp	Event Category	y Severity	Quality
[TES]	FE] Fix32.TESTE.M	BE_10.F_CV set to 1 by T.	iFIX	2/9/2012 3:21:17 PM	Operator Proce	150	3
[TES]	TE] Fix32.TESTE.M	BE_10.F_CV set to 50 by .	iFIX	2/9/2012 3:20:44 PM	Operator Proce	e 150	3
[TES]	TE] MBE_10 ALARI	M is acknowledged by TES	i iFIX	2/9/2012 3:20:40 PM	Operator Proce	e 150	3
[TES]	FE] Fix32.TESTE.M	BE_10.F_CV set to 99 by .	iFIX	2/9/2012 3:20:34 PM	Operator Proce	e 150	3
[TES]	FE] ALL ALARMS a	icknowledged by TESTE::.	iFIX	2/9/2012 3:20:31 PM	Operator Proce	s 150	3
[TES]	<pre>FE]MBE_8_3ALAF</pre>	RM is acknowledged by TE	iFIX	2/9/2012 3:20:28 PM	Operator Proce	e 150	3
[TES]	<pre>FE] MBE_8_5 ALAF</pre>	RM is acknowledged by TE	iFIX	2/9/2012 3:20:28 PM	Operator Proce	e 150	3
[TES]	<pre>FE] MBE_8_8 ALAF</pre>	RM is acknowledged by TE	iFIX	2/9/2012 3:20:27 PM	Operator Proce	e 150	3
[TES]	<pre>FE] MBE_8_7 ALAF</pre>	RM is acknowledged by TE	iFIX	2/9/2012 3:20:26 PM	Operator Proce	e 150	3
[TES	TE]MBE_8_10 ALA	RM is acknowledged by T	iFIX	2/9/2012 3:20:26 PM	Operator Proce	e 150	3
,							
			Refresh				Close

Pelo Excel Add-In:

- Abra o Excel. Certifique-se de que o Historian Excel Add-In está habilitado.
 Selecione o menu "Historian" -> "Query Alarms & Events".
 Configure a tela, conforme imagem abaixo para consultar todos os alarmes de um tag predefinido:



[CUR5021]	Select	,
Use Default Server		
put Settings		
Query Type		
Alarms C Alarm H	story C Events	
Query Criteria		
Prev_Value	Add query criteria where	Retrieve Alarms Where Remove Selected
Process	Source	
Quality	is Equal To (String Mask)	Source is Equal 10 (Stilling Mask) TESTE.MBE_10
Severity	u value en cell	
SourceTag	Value or cell	
Start Time	TESTE.MBE_10	
Circle Maler I. C	Add to Query	
· · · · · ·	Had to Query	
utput Settings		
Output Cell	Output Orientation	Maximum Results
Sheet1!\$A\$3	Columns	C Rows 100 + Records
Output Display	Output Sorting	
oacpac bispiay	Caut Drug 🔎 Alarm Time	C. Custom Sort
*All Standard Attributes		
*All Standard Attributes	SUIL BY: ** Main Time	Check for
*All Standard Attributes Ack Time Ack_By_FullName	Sortable Attributes	Check for Descending Attribute Sort
*All Standard Attributes Ack Time Ack_By_FullName Ack_Comment Ack_d	Sort by: Addit Time	Check for Descending Attribute Sort
"All Standard Attributes Ack Time Ack_By_FullName Ack_Comment Acked Actor	Sortable Attributes	Check for Descending Attribute Sort
Xall Standard Attributes Xall Standard Attributes Ack Time Ack_By_FullName Ack_Comment Ackor Actor Alarn Id	Sortable Attributes Ack Time Acked Actor	Check for Descending Attribute Sort
*All Standard Attributes *All Standard Attributes Ack Time Ack_By_FullName Ack_Comment Ackor Actor Alarm Id Alarm_Status	Sortable Attributes Ack Time Acked Actor Alarm Id	Check for Descending Attribute Sort
*All Standard Attributes Ack Time Ack By FullName Ack_Comment Acked Actor Alarm Id Alarm_Status Application	Sortable Attributes Ack Time Acked Actor Alarm Id Condition Name	Check for Descending Attribute Sort
*All Standard Attributes Ack Time Ack By FullName Ack_Comment Acked Actor Alarm Id Alarm Status Application Application	Sortable Attributes Ack Time Acked Actor Alarm Id Condition Name Data Source Name	Check for Descending Attribute Sort
*All Standard Attributes Ack Time Ack, Dy_FullName Ack_Comment Acked Actor Alarm Id Alarm Status Application Application	Sort By: Addit Time Sortable Attributes Ack Time Acked Actor Alarm Id Condition Name Data Source Name	Check for Descending Attribute Sort

- a. Em "Query Criteria", selecione "Source".
 b. Em "Value or cell", defina o nome do tag, no caso TESTE.MBE_10
 c. Pressione o botão "Add to Query"
 d. Em "Output Cell", defina em qual célula as informações serão inseridas
- e. Mantenha a opção *All Standard Attributes em "Output Display"
- f. Pressione OK.
- 4) O resultado da consulta será:

M	Microsoft	Excel - Bo	ook2											
8	<u>F</u> ile <u>E</u> dit	⊻iew <u>I</u> r	nsert f	F <u>o</u> rmat	<u>T</u> ools <u>D</u> at	a <u>W</u> ind	ow Hi <u>s</u> l	torian <u>H</u> elp					Type a que:	stion for help
D	🛩 日 🔒	8 🔁 🖉	0 🖪 🖞	8 %	🖻 🗠 -	🤹 Σ	- <u></u> ≵↓	۵ 🕵 🏨	» Arial		• 10 • B Z	u ≡≡∎	\$ % 🕼	: 🖂 - 🕭
	A1	-	f*											
	A		В		C		D	E	F	G	Н		J	
1]												
2	Alarm Id	Source			Data Source	ce Name	Conditi	Sub Cond	Messa	Event Cate	Start Time	End Time	Acked	Ack Time
3	3604	TESTE.N	4BE_10)	CURSO27	_iFIX	Tag	LOLO		Tag	09-Feb-12 15:21:18		FALSE	
4	3603	TESTE.N	/BE_10)	CURSO27	_iFIX	Tag	OK		Tag	09-Feb-12 15:20:34	09-Feb-12 15:20:45	TRUE	09-Feb-12
5	10	TESTE.N	/BE_10)	CURSO27	_iFIX	Tag	OK		Tag	09-Feb-12 15:05:45	09-Feb-12 15:07:51	FALSE	
6														
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Pelo Visicon X do iFIX:

- 1) No Workspace do iFIX em modo de configuração, crie uma nova tela.
- 2) Em seguida, insira o objeto "VisiconX Data Control".

🔮 VisiconXTool 🗵		untitled1.
<u>8</u> 🐼 💀		
VisiconX Data Control	\$P \$P	

- 3) Abra a tela de configuração do objeto vxData1 com duplo click.
- 4) Na aba provider, selecione "Historian OLE DB Provider":

VisiconXData.vxData Properties	×
VisiconX Data Control	
Provider Database Record Source	
Select Data Provider	
Historian OLE DB Provider MediaCatalogDB OLE DB Provider MediaCatalogMergedDB OLE DB Provider MediaCatalogWebDB OLE DB Provider Microsoft Jet 4.0 OLE DB Provider Microsoft OLE DB Provider For Data Mining Services	

5) Na aba "Record Source" pressione o botão Run SQL Wizard.

VisiconXData.vxData Properties	×
VisiconX Data Control	
Provider Database Record Source	
Select Record Source Command Type: SQL Command SQL Command SQL Command C Perform Only C Perform And Verify	
🗂 Do not allow SQLWizard at runtime 🦷 🔨 Run SQL Wizard	
Enter SQL command below or select the Wizard to create a database	

6) Pressione o botão "Next" na próxima tela e em seguida o botão "SQL Select"



Select Operation	
SQL Select	Select this option to construct a SQL SELECT command
SQL Insert	Select this option to construct a SQL INSERT command
SQL Update	Select this option to construct a SQL UPDATE command
< Back	Nevt > Finish Cancel Help

7) E configure conforme a seqüência de imagens para selecionar os alarmes de um tag predefinido:

Select Tables		
Available Tables: ihArchives ihCalculationDependencies ihCollectors ihComments ihMessages ihQuerySettings ihRawData ihTags ihTrend ihAlarms	Add -> ihAlarms All ->> <- Remove	→ ←
< Back Next >	Finish Cancel	Help



Available Columns: * (All Columns) ihAlarms.AlarmID ihAlarms.ItemID ihAlarms.Source ihAlarms.DataSource ihAlarms.Tagname ihAlarms.AlarmType ihAlarms.EventCategory ihAlarms.SubCondition ihAlarms.SubCondition ihAlarms.StartTime ihAlarms.EndTime ihAlarms.AckTime	Add -> * (All Columns) All ->> * (All Columns) <- Remove
< Back Next >	Return Unique Rows Finish Cancel Help
Create Row Filter	
Available Columns: ihAlarms.AlarmID ihAlarms.ItemID ihAlarms.DataSource ihAlarms.Tagname ihAlarms.AlarmType ihAlarms.EventCategory ihAlarms.SubCondition	Add -> ihAlarms.Source All ->> <- Remove
Available Columns: ihAlarms.AlarmID ihAlarms.ItemID ihAlarms.DataSource ihAlarms.Tagname ihAlarms.AlarmType ihAlarms.EventCategory ihAlarms.Condition ihAlarms.SubCondition	Add -> Add -> All ->> <- Remove



Select Columns to Sort by		
Available Columns: ihAlarms.AlarmID ihAlarms.ItemID ihAlarms.Source ihAlarms.DataSource ihAlarms.Tagname ihAlarms.AlarmType ihAlarms.EventCategory ihAlarms.Condition ihAlarms.SubCondition	Selected Columns: Add -> All ->> <- Remove < All	¢
< Back Ne	Sort this column: in Ascending Order	Help
Finish		
Finish Below is the SQL statemen You may manually edit this state SELECT * FROM ihAlarms WHERE (ihAlarms.Source = 'TESTE.MI	nt generated by the Wizard: ement before clicking OK if required BE_10')	
Finish Below is the SQL statemen You may manually edit this state SELECT FROM ihAlarms WHERE (ihAlarms.Source = 'TESTE.MI	nt generated by the Wizard: ement before clicking OK if required BE_10') exit or click Back to make changes	

- 8) Pressione OK para finalizar a configuração do objeto de consulta.9) Para apresentar as informações, insira um objeto VisconX Grid Control





- 10) Pressione sobre o objeto com botão direto do mouse e selecione a opção "Animations...", em seguida o botão "Configure"
- 11) Na aba Behavior, configure conforme a imagem abaixo:





rid1 Animations		1
neral Appearance Text	Behavior Misc	
Properties		
Property Name	Current Setting	Animate Property Description:
ADORecords		ADO Recordset used to populate the grid
AutoResize	TRUE	
DisplayHeaders	TRUE	
DisplayRowMarker	TRUE	
Cols	2	
Rows	2	
ShowMilliseconds	FALSE	
Allow! IserResizing	TRUE	
Data	Conversion: Object	

12) Salve a tela com o nome desejado e execute:





e	AE_Visicon.grf –							x		
								-		
	alarmid	itemid		datasource	tanama	alarmtyne	eventcategory	condition	subcondition	_
	3604	TESTE.MBE 10.F CV	TESTE.MBE 10	CURSO27 IFIX	tagname	Alarms	Tag	Tag	LOLO	-
	10	TESTE.MBE_10.F_CV	TESTE.MBE_10	CURSO27_iFIX		Alarms	Tag	Tag	OK	
	3603	TESTE.MBE_10.F_CV	TESTE.MBE_10	CURSO27_iFIX		Alarms	Tag	Tag	OK	
									L	2