



OSIsoft Virtual Campus

Presented by Steve Pilon

Empowering Business in Real Time
PI Infrastructure for the Enterprise

Agenda

- OSIssoft Virtual Campus
 - The Situation
 - The Need
 - Our Current Offering
 - Our Answer

Who is this talk for?

Value Now,
Value Over Time

ROI

`Dim srv As PISDK.Server`



The Situation

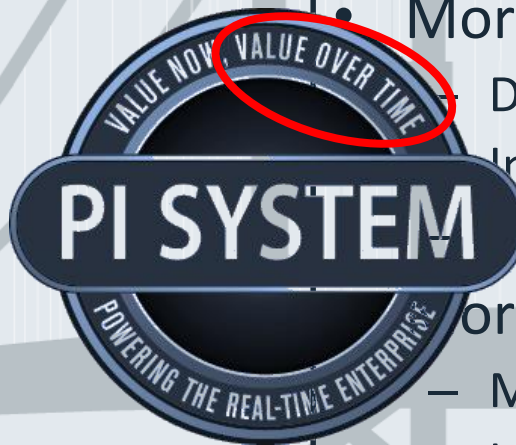
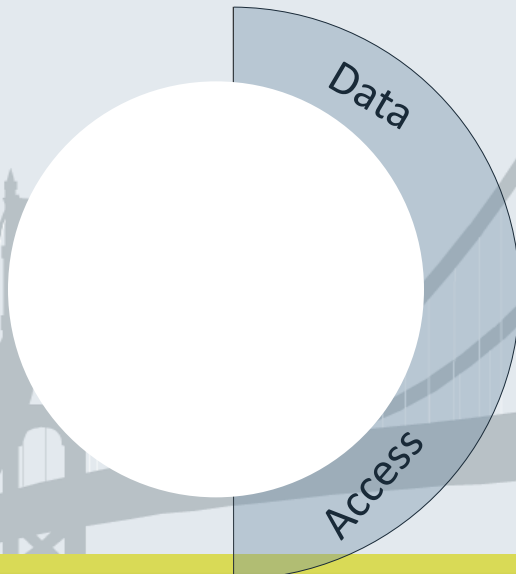
OSIsoft

Partners

Customers



The Need



- More & Better Applications

- Domain-Specific
- Industry-Specific
- Customer-Specific

- More & Better Integration

- MOSS
- LOBs (ERP, CRM, etc.)

People Spoke – We Listened

- Community-oriented communication mechanisms
- Faster and simpler access to technical support from OSIsoft, regarding PI Programming
- More insight on OSIsoft's directions, as far as its product line and 'data access' technologies goes

Our Current Offering – Data Access

1980's

- PI Toolkit (VMS)
- PINet

1993+

- PI API, PI ODBC

1998+

- PI SDK, PI OLEDB

2002-2006

- PI DAP
(PI API, PI SDK, PI ODBC, PI OLEDB)

2006+

- PI DA Module
(PI ODBC, PI OLEDB, P

And
AF SDK??

Our Current Offering - Communication

- **End-User Support:**
 - Great support, lots of documents and articles
- **Development Support:**
 - Small number of programming-related documents/articles
- **End-User Collaboration/Community:**
 - SIGs and webinars
- **Development Collaboration/Community:**
 - Nothing so far



Our Answer: Virtual Campus

- **Community**-oriented program for PI developers
 - Customers
 - Partners
 - OSIsoft employees
- Provide everything necessary to **build applications** on top of PI, focus on '**doing it right**'
 - PI software for development
 - Resources
 - Support/Collaboration in various ways



Getting Onboard

- Apply online: vCampus.osisoft.com
- Subscription Types
 - **Individual**
 - **Team** (10 seats)
 - **Enterprise** (unlimited seats)
- Trading of **EA** vouchers
(contact your EPM)

Virtual Campus Components

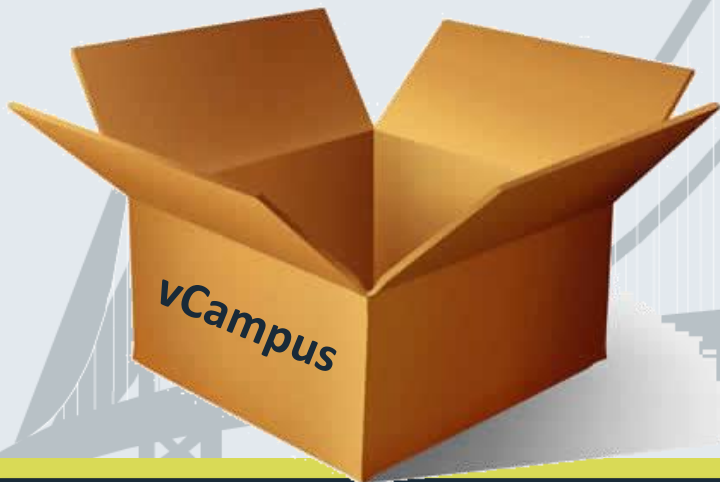
Servers
<ul style="list-style-type: none">• PI Server• AF Server• Notifications Server• ACE Server
Clients & Interfaces
<ul style="list-style-type: none">• PI ProcessBook• PI DataLink• PI WebParts• PitoPI Interface
Data Access
<ul style="list-style-type: none">• PI SDK• AF SDK• PI OLEDB• PI OPC
Online Resources
<ul style="list-style-type: none">• Forums & Blogs• Webinars• Documentation• Technical Articles• Demos/Labs
Community
<ul style="list-style-type: none">• Peers• vCampus Team• Many other OSIsoft people

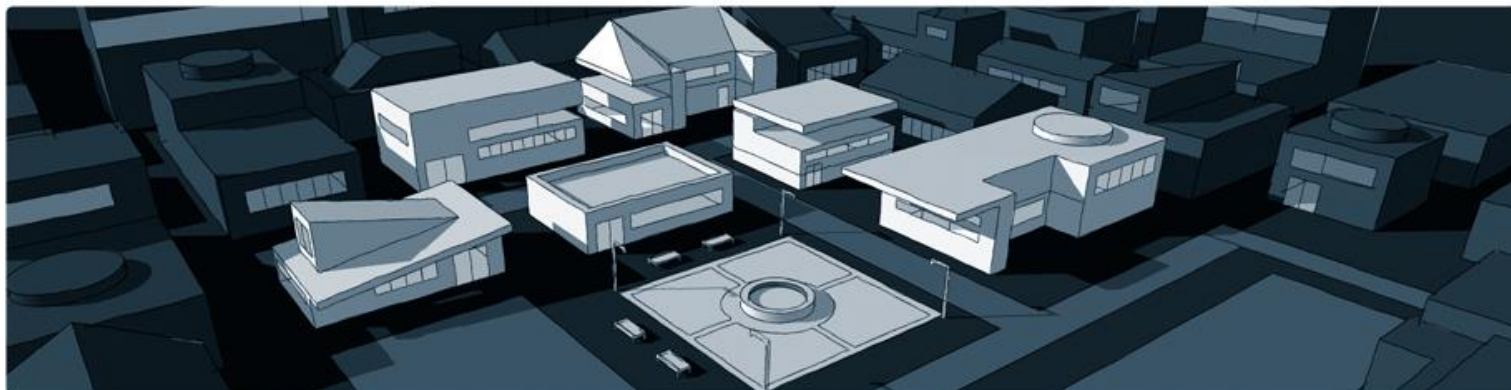
Servers

- PI Server
- AF Server
- Notifications Server
- ACE Server
- Demos/Labs



Resources





WHAT IS VIRTUAL CAMPUS?

vCampus is a **subscription**-based, online offering that consists of providing everything people need to **develop applications** on the PI System. Focusing on 'doing it right', this **community**-oriented program provides resources such as:

- Full development **PI System**
- **Community** experience with discussion **forums** and **blogs**
- Online **library**
- Technical, interactive **webinars**

vCampus is intended to facilitate and encourage communication around PI programming and integration (good PI programming, that is), between OSIsoft partners, customers and employees. Please consult our [FAQ](#) or [contact us](#) for more details.

EVENTS

[28-May-09] vCampus webinar: **PI Programming 101** (Sign up in the **Upcoming Webinars** section of the **vCampus Auditorium**!)

[30-Apr-09] vCampus webinar: **Discoveries from UC2009** (Sign up in the **Upcoming Webinars** section of the **vCampus Auditorium**!)

[31-Mar-09] 20th **Users Conference** in San Francisco

[26-Mar-09] vCampus webinar: **OPC - Past, Present and Future** (Sign up now in the **Upcoming Webinars** section of the **vCampus Auditorium**!)

[26-Feb-09] vCampus webinar: **Programming .NET Add-Ins for PI**

NEWS

[31-Mar-09] The recording for the **OPC - Past, Present and Future** (held on March 26th) was made available in the **vCampus Auditorium** - [click here](#) to view or download

[06-Mar-09] The recording for the **Programming .NET Add-Ins for PI ProcessBook** (held on February 26th) was made available in the **vCampus Auditorium** - [click here](#) to view or download

[26-Feb-09] Registration is open for the next vCampus webinar: **OPC - Past, Present and Future**. Visit the **UPCOMING WEBINARS** section of the **vCampus Auditorium**

[13-Feb-09] Registration is open for the

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 - ☐ AN SDK Programming Reference
 - ☐ PI Notifications Programmer Guide
 - ☐ PI OLEDB Provider Manual
 - ☐ PI OPC DA-HDA Server Manual
 - ☐ PI SDK Programming Reference
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 - ☒ White Papers and Tutorials
 - ☒ PI AF
 - ☒ **White Paper - Implementing AF 2.0 Data References**
 - ☐ Tutorial - Create AF Element Templates from a CSV File
 - ☒ PI OLEDB Provider
 - ☒ PI ProcessBook






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58.5%



Find

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DISCUSSION HALL

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GENERIC FORUMS

		Latest post	Threads	Posts
	Generic vCampus Discussions This forum is for generic discussions about the Virtual Campus, typically not programming-related.	Re: Your ideas of... by Cristobal Escamilla Tue, Mar 17 2009 8:47 AM	10	54
	General .NET Development This forum is for any generic .NET development question, not necessarily related to PI.	Re: Visual Studio... by Chad Chisholm Tue, Mar 31 2009 10:50 AM	9	26
	PI System Integration and Administration This forum is for questions on integration and administration of the PI System - not necessarily programming related.	Re: Sample data by Nick Dorazio Wed, Mar 25 2009 2:55 PM	16	110
	Online Courses This forum is dedicated to non-technical discussions around the Online Courses - or CBTs, Computer-Based Training - provided on vCampus.	Re: Welcome to the... by Pablo Benvenuto Mon, Mar 9 2009 2:24 PM	1	2

DEVELOPMENT WITH OSISOFT SDKS

		Latest post	Threads	Posts
	PI SDK Development	Re: How to retrieve... by Steve Pilon		

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[OPC UA](#) [PerformancePoint](#) [PI OLEDB](#) [PI](#)



Discussion Hall > Development with OSIsoft SDKs > AF SDK Development > Obtain Annotations from AFValue object in AFDataReference

Latest post Tue, Mar 17 2009 10:38 AM by Steve Pilon. 3 replies.



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Page 1 of 1 (4 items)

Fri, Mar 13 2009 3:11 AM

Eiko Willemssen



Joined on Wed, Dec 3 2008

Groningen (the Netherlands)

Posts 17

Obtain Annotations from AFValue object in AFDataReference



Reply



Delete



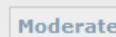
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Moderate

I am quite new to AF SDK Development, so maybe this is a silly question...

I am creating a DataReference (derive from AFDataReference).

This DataReference should (according to the configuration) select one AFValue. It can be configured to return a configured (by Attribute Name) value, but it should also be able to select an AFValue depending on an Annotation.

Please consider the following code:

```
public override AFValue GetValue(object context, object timeContext, AFAttributeList inputAttr
{
    if (inputValues.Count == 1 && SelectorMode == StreamSelectorMode.Single)
        return inputValues[0];
    else if (inputValues.Count > 1 && SelectorMode == StreamSelectorMode.Single)
    {
        AFValue val1 = inputValues[0];
        AFValue val2 = inputValues[1];

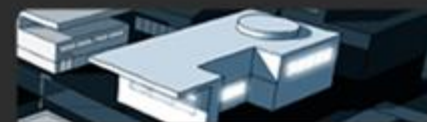
        return double.Parse(val1.Value.ToString()) > double.Parse(val2.Value.ToString()) ? va
    }
    return inputValues[0];
}
```

At this point, it just selects the highest value (if 2 values are present). This should be a selection based on an Annotation. The AFValue object does contain an 'Annotated' bool, but I am unable to find out how to obtain the actual annotation.



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AUDITORIUM

Recorded Webinars

Builders' Café Webinar Series: Tour of the AF and PI Notifications Developer Tools by Steve Pilon [Thu, Jan 29 2009]

This is the recording for the vCampus-exclusive webinar titled "**Tour of the AF and PI Notifications Developer Tools**" (part of the "**Builders' Café**" webinar series). This was held on January 29th, 2009.

The webinar first gives an introduction on 2 OSIsoft products (AF and PI Notifications) and then covers 2 great resource kits available to developers via the vCampus program: AF Developer Tools and PI Notifications Developer tools.

Make sure you watch it until the end: we had a great Question and Answers (**Q&A**) session where the 2 lead developers and the product manager were personally answering questions from the attendance. Speakers were:

- Steve Pilon, vCampus Team Member
- Laurent Garrigues, Product Manager at OSIsoft
- Chris Manhard, Lead Developer for PI AF
- Beth McNeill, Lead Developer for PI Notifications

UPCOMING WEBINARS

Builders' Café Webinar Series:

[30-Apr-09] Discoveries from UC2009
(**Register now!**)

[28-May-09] PI Programming 101
(Registration to open soon)

SHORTCUTS

- Media Gallery Administration

TAG CLOUD

Builders' Café Webinar Series Daemon Tools

DVD emulation OPC DA/HDA Server



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`<script type="text/ja`Filed under: [Builders' Café Webinar Series](#), [OPC DA/HDA Server](#) [[Edit Tags](#)]

This is the recording for the vCampus-exclusive webinar titled **"OPC - Past, Present and Future"** (part of the **"Builders' Café" webinar series**). This was held on March 26th, 2009.

This webinar gave a tour of OPC in the context of PI programming. While OPC is widely used in the process automation world, it seems not as widely known in the community of PI programmers.

In this webinar you will learn where and how OPC has its place in the PI development paradigm. For example, how to develop an OPC DA application that reads/writes PI snapshot data, or an OPC HDA application that reads/writes PI archive data.

A live **Q&A** session was held at the end of the webinar, where attendees could ask question to the guest speakers.

UPCOMING WEBINARS

Builders' Café Webinar Series:[\[30-Apr-09\] Discoveries from UC2009 \(Register now!\)](#)[\[28-May-09\] PI Programming 101 \(Registration to open soon\)](#)

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- [Builders' Café Webinar Series: Programming .NET... \[Fri, Mar 6 2009\]](#)
- [Builders' Café Webinar Series: Tour of the AF... \[Thu, Jan 29 2009\]](#)
- [Builders' Café Webinar Series: Foreword and Introductions \[Mon, Dec 22 2008\]](#)
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AdHoc Calculations in RtWebparts (2)	Andreas	Andreas' Blog	31	Thu, Mar 5 2009	
Replacing Ad-hoc Traces in RtTrend	Paul Kaiser	RtWebParts Team Blog	24	Fri, Feb 27 2009	
"PI Interfaces - Keeping it simple (Part 2)"	Bryan	Bryan Owen's Blog	44	Thu, Feb 26 2009	
PerformancePoint for	David Doll	OSIsoft Microsoft Alliance	48	Tue, Feb 24 2009	

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PI SYSTEM MANAGER I: ESSENTIAL SKILLS

Audience:

This course is for students who are interested in learning the routine PI system management tasks, and who have many other tasks besides managing a PI Server and who do not consider themselves a server expert or systems administrator. These may include experienced control engineers who have at some time configured process control or data archiving software, others are expert Windows Server System Administrators, and managing the PI Server is simply another server they have to maintain. The course is also well suited for information systems managers who will be making on-going implementation decisions and who will be setting priorities.

[Launch Course](#)[Course Materials](#)[Course Discussion](#)

Prerequisites:

The student should be familiar with the following:

- Basic Windows and Network security (why you log in, what is a domain, etc)
- Basic directory navigation and management (using Windows Explorer, creating and finding files)
- Using DOS commands
- Creating a file with a text editor
- Be familiar with your real time data sources (control systems, PLCs, OPC)

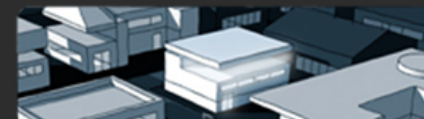
Class Outline:

COURSE RESOURCES

For comments on the content of these online courses, please contact **Nick D'Orazio**. For technical questions or if the CBTs are not working properly, please contact >>

CBT SOFTWARE REQUIREMENTS

The video content presented here requires **JavaScript** to be enabled and the latest version of the **Macromedia Flash Player**. If you are using a browser with JavaScript disabled please enable it now. The best wa >>



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DOWNLOAD CENTER

Provided with the vCampus subscription is a complete set of PI Products to install and use as a development PI system. At this time this kit is available as a DVD image, under the form of an .ISO file. To make use of this .ISO file, one can:

- Burn it to a writable DVD using any DVD burning software;
- Load it in a CD/DVD emulation software such as Daemon Tools (see links on the right-hand side).

Just like any other regular PI System, a PI License file is required to install the PI Server component. While the kit comes with a 30-day temporary license, you will need to download the appropriate PI License File to use the software for the full length of your subscription (please see the links on the right-hand side).

Category Software

Name	Version	Size
» AF Developer Tools	2.0.3.2019	6.17 MB
» PI Products for vCampus (DVD Image)	V1- Nov. 08	986 MB
This kit contains the necessary PI products to install a development PI System: Servers (PI Server, AF Server, Notifications Server, ACE Server) Clients (PI ProcessBook, PI DataLink, RtWebParts, PItoPI Interface) Data Access technologies (PI SDK, AF SDK, PI OLEDB Provider, PI OPC DA/HDA Server)		Download
» Notifications Developer Tools	1.0.777.0	11.2 MB
» ProcessBook 3x NET Add-In Templates (C Sharp)	C# - VS2005	1.93 MB
» ProcessBook 3.x .NET Add-In Templates (VB.NET)	VB.NET - VS2005	2.87 MB
» Machine Signature File (MSF) Generator	1.0.0.1	588 KB

MY LICENSE ACTIVATIONS

Link to the **My License Activations (MLA)** section of the **Technical Support website**, to obtain your **license file**:

[Link to MLA](#)

DVD IMAGE WEBINAR

Make sure you check out this **webinar** if you are not familiar with the use of **DVD images**:

[Link to the "DVD Image" webinar](#)

DevNet/OSIDN

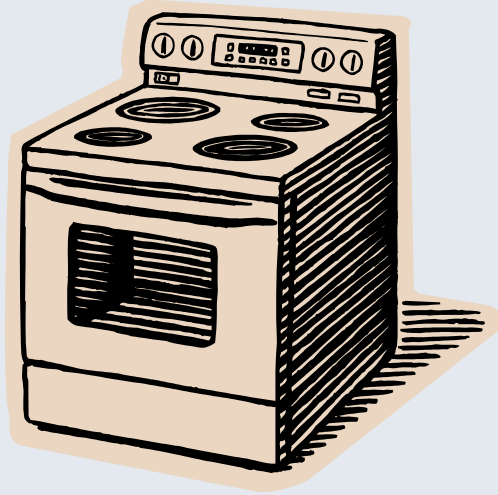
vCampus

- Ready-to-use contents
- Full PI System
- Community
- Guidance/Support
- Resources
- Best Practices
- DevNet will be decommissioned
 - Applicable contents moved to vCampus Library

DevNet



vCampus



A Developer Conference?

vCampus Live!

- December 2009
- Palace Hotel, San Francisco
- Stay tuned for registration



Call for Action

- This week:
 - Go to talk to vCampus community members
- When you're back in the office:
 - Go register online!
Start developing and collaborating
- Stay tuned for "vCampus Live!" registration



vCampus.osisoft.com