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## ■ 28th TANGO Collaboration Meeting

OPC-UA

- **The successor of OPC-DA (OLE for Process Control Data Access)**
  
- **Released in 2006 by the OPC Foundation**
  
- **OPC was COM/DCOM (1996)**
  
- **OPC-UA is a cross-platform service-oriented architecture**
  - Security enhancement, redundancy, heartbeat

- **Need of a framework**
  
- **OpenOpcUa is an open-source and multi-platform framework**
  
- **Created by a consortium of French companies**
  
- **CECILL-C Licensed → compatible with GNU LGPL**
  - CECILL stand for CEa Cnrs Inria Logiciel Libre

- **TangoOpcUaAccess**
- **« Simple » device server for accessing an OPC-UA Server**
- **Provides getter/setter for the common basic types**
- **OpcUaServerAddress : `opc.tcp://localhost:16664/4CEUAServer`**

## ■ TangoOpcUaObject

### ■ Device Server which dynamically create attributes from properties

- OpcTags :  
*attr\_name!Boolean!READ\_WRITE!tag\_read\_name!tag\_write\_name*
- StateDefinition : *tagname!1:OFF!2:ON!3:FAULT*

The screenshot shows the Jive 4.24 OPC-UA interface. The left pane displays a tree view of the device structure, with the 'Properties' folder under the selected 'OpcUaObject' expanded. The right pane, titled 'Device properties [opc/ua/obj]', displays a table of properties and their values.

Property name	Value
OpcTags	MyDynFloat!Float!Read!Dynamic:Scalar:Float MyUshort!UShort!ReadWrite!Static:Scalar:UInt16!Static:Scalar:UInt16 MyDynDouble!Double!Read!Dynamic:Scalar:Double MyLong!Long!ReadWrite!Static:Scalar:Int32!Static:Scalar:Int32 MyDynLong!Long!Read!Dynamic:Scalar:Int32
OpcUaAccessDeviceName	opc/ua/test
StateDefinition	Static:Scalar:UInt16!UShort!1:OFF!2:ON!3:FAULT
_SubDevices	opc/ua/test

At the bottom of the right pane, there are five buttons: Refresh, Apply, New property, Copy, and Delete.



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■ ■ Questions ?