

iPORT™ AutoGEV™ Mapping Tool for GigE Vision

Fast, Cost-Effective, Reliable GigE Vision Compliance

Features

- Autogenerates the GenICam-compatible XML file
- Guarantees consistency between XML file and hardware
- Straightforward GUI for camera database creation and management

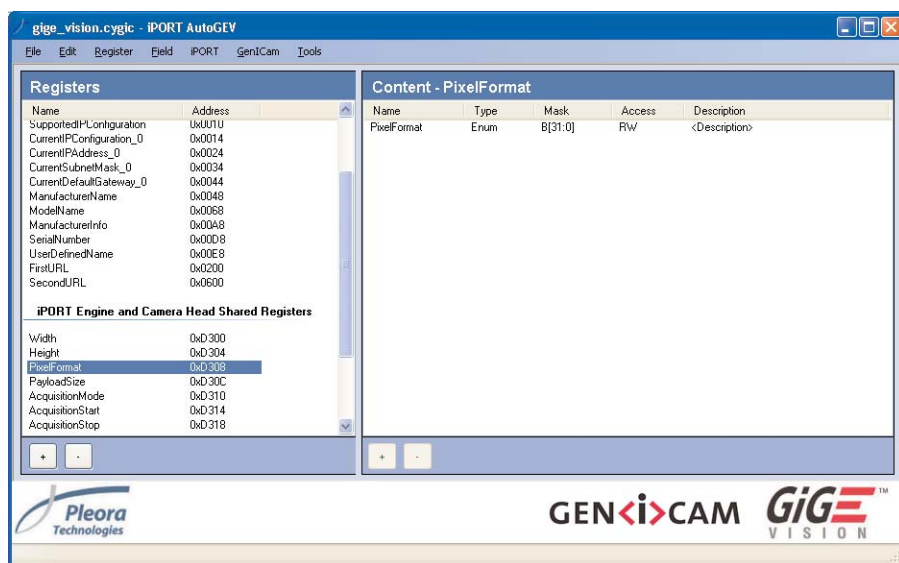


iPORT AutoGEV is an ingenious mapping tool that makes it fast and easy to gain compliance for any GigE camera or OEM system that uses Pleora's iPORT GigE connectivity products. It also allows Camera Link™ cameras to be integrated seamlessly into GigE Vision-compliant applications.

AutoGEV inter-works Pleora's new eBUS™ driver - as well as innovations for compliance in iPORT IP engines and the iPORT SDK - to form a comprehensive GigE Vision platform.

From a user-friendly GUI, camera vendors and systems integrators use iPORT AutoGEV to build a database that maps GigE Vision read/write requests to existing serial camera control commands. AutoGEV uses this database to auto-generate the XML (extended mark-up language) device description file that must be provided with compliant cameras. This XML file defines the relationship between camera features and the GigE Vision registers used to access and control compliant cameras.

Vendors then simply load the AutoGEV database and the XML file – if they choose to provide the XML file that way; they can also provide it as a web download or on disk – into the camera's internal iPORT IP Engine or a standalone iPORT engine connected to the camera. After that, the iPORT engine performs all tasks required to ensure the camera complies with the standard. It provides the XML file (if available in the GigE Vision-compliant device) to the GenICam module in the PC host, handles all commands to and from the camera, and delivers real-time communications over the GigE link in accordance with GigE Vision Protocols.



Screen Capture from the AutoGEV Main Page

AutoGEV Applications

- **GigE Cameras**
 - PT1000-VB
 - iPORT-enabled cameras*
- **Camera Link Cameras**
 - PT1000-CL
 - FB1000-CL
- **OEM Equipment**
 - PT1000-ST
 - FB1000-ST

* For a partial list of iPORT-enabled cameras, visit www.pleora.com/camera_partners.

```

<?xml version="1.0" encoding="utf-8" ?>
- <RegisterDescription ModelName="Model" VendorName="Pleora" ToolTip="Device
  description" StandardNameSpace="Standard" SchemaMajorVersion="1"
  SchemaMinorVersion="0" SchemaSubMinorVersion="1" MajorVersion="1"
  MinorVersion="0" SubMinorVersion="0" ProductGuid="CB9328DB-1273-42a3-
  90C7-EB3224537C39" VersionGuid="321DAFF5-A243-42ae-8B5D-
  B5BD18C31488" xmlns="http://www.genicam.org/GenApi/Version_1_0"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.genicam.org/GenApi/Version_1_0 ../GenApiSc
- <Group Comment="Bootstrap">
  - <Category Name="Bootstrap">
    <pFeature>ManufacturerName</pFeature>
    <pFeature>ModelName</pFeature>
    <pFeature>CurrentDefaultGateway_0</pFeature>
    <pFeature>CurrentIPAddress0</pFeature>
    <pFeature>CurrentSubnetMask0</pFeature>
    <pFeature>FirstURL</pFeature>
    <pFeature>SecondURL</pFeature>
    <pFeature>UserDefinedName</pFeature>
    <pFeature>ManufacturerInfo</pFeature>
    <pFeature>SerialNumber</pFeature>
    <pFeature>CurrentPersistentIP</pFeature>
  
```

About GigE Vision

GigE Vision is the AIA's (Automated Imaging Association) new standard for interconnecting industrial cameras and computers over standard GigE links and LANs. The first version of the standard was officially launched at Vision Show East in May 2006.

GigE Vision has been under development since 2003, first by an industry group led by Pleora President George Chamberlain and Toshi Hori, then President of Pulnix, and later under the stewardship of the AIA. Today, Francois Gobeil, a senior engineer at Pleora, serves as Vice-Chair of the AIA GigE Vision Committee. The standard is based on many concepts pioneered by Pleora in its iPORT protocol, and used by the AIA with Pleora's permission.

GigE Vision has three main components: GVCP (GigE Vision Control Protocol), which defines how to control cameras and send image data to the host; GVSP (GigE Vision Streaming Protocol), which defines data types and describes how images are transmitted; and the Device Discovery mechanism, which defines how cameras obtain IP addresses, are identified on the network, and interoperate with third-party software.

As part of the Device Discovery mechanism, camera vendors must provide customers with an XML file that describes camera-specific parameters in the format defined by the EMVA's (European Machine Vision Association) GeniCam standard.