

# IBM ILOG JViews TGO V8.6 JViews TGO Glossary

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G L O S S A R Y

# IBM® ILOG® JViews TGO glossary

# adapter

An adapter converts *business objects* into *representation objects* and pushes these objects into the corresponding *representation model*. There is a specific adapter for each representation model (that is, table, tree, equipment, and network). An adapter is generally connected to a *data source*.

# Bellcore state dictionary

A dictionary of telecommunication object states based on the Bellcore (Bell Communications Research) standard specified in GR-1093-Generic State Requirements for Network Elements.

# blinking manager

A *context* service that manages the blinking of colors.

### **BTS**

A predefined business object. A BTS (Base Transceiver Station) is a base station composed of antennas that relay (receive and transmit) radio messages within cells of a cellular phone system.

### business model

The business model describes the attributes and inheritance of *business object* classes. It serves as a common vocabulary between IBM® ILOG® JViews TGO and the back-end application. It does not address relationships between these classes.

# business object

An instance of a business class. A business object typically corresponds to a "real" business object somewhere in the back-end application. Business objects represent a subset of the back-end data manipulated by IBM® ILOG® JViews TGO. They can be shared across multiple graphic components. IBM® ILOG® JViews TGO furnishes a number of predefined business objects.

See business model. See also the predefined business objects: BTS, card, group, link, network element, off-page connector.

### card

A predefined business object. An item of equipment that is inserted in a shelf.

### card carrier

A predefined business object. A card carrier is a container for shelf item objects. Card carriers allow you to associate more than one *card* with a single slot.

# class manager

A *context* service that handles a *business model*. The class manager makes business object classes available to the whole application and allows them to be used by all of the components.

# computed attribute

A computed attribute is an attribute of which the value is derived from the value of other attributes. For example, given a start and a finish date, it is possible to calculate a duration.

### context

The application context provides access to common contextual data (such as the locale or the current user) and services (such as the URL access service or the class manager).

### controller

The controller translates interactions with the *view*, such as mouse clicks and keystrokes, into updates to be performed on the *representation model*, instructing the model and/or the view to change as appropriate.

### **CSS**

Cascading Style Sheets. A language that provides rich stylistic control of content to be published on browsers.

# CSS<sub>2</sub>

Cascading Style Sheets, level 2. A style sheet language that allows authors to attach style to structured documents, such as HTML documents or XML applications. CSS2 separates the presentation style from the content and thus simplifies Web authoring and site maintenance.

### data source

A data source retrieves business objects from a back-end application and transforms them into IlpObject instances. A data source is back-end specific, which means that there is a data source for each type of back end to be addressed.

### data source manager

A context service that provides access to the data sources that it handles.

### declaration

(CSS.) A property and a corresponding value.

# deployment descriptor

A file that defines the application behavior. It is used to initialize an application context.

# dictionary visuals

A set of predefined visuals to graphically represent state and alarm dictionaries based on telecommunication standards. A set of attributes associated with predefined styles and rendering policies.

# dynamic attribute model

The dynamic attribute model allows you to define the attributes carried by an object at run time.

See static class.

# empty slot

A predefined business object. An empty portion of a shelf that can represent alarms and states graphically.

# equipment component

The equipment component is one of the four graphic components provided in IBM® ILOG® JViews TGO. It is designed to display and interact over telecommunication equipment such as shelves, cards, ports, links and LEDs. The equipment component encapsulates the MVC architecture.

# equipment editor

The equipment editor is a graphical user interface which allows you to design and edit equipment elements such as shelves, cards, ports and LEDs.

### expansion strategy

A strategy used at the adapter level to identify whether objects should be loaded or not in the representation model. The expansion strategy defines how an object is going to behave when it is expanded. It also indicates whether *load on demand* is implemented.

# graphic component

IBM® ILOG® JViews TGO graphic components encapsulate the *MVC* triad that clearly separates data from its graphic representation. IBM® ILOG® JViews TGO provides four main components: the *table component*, the *tree component*, the *network component*, and the *equipment component*.

See also controller, representation model, view.

# graphic holder

A graphic holder is responsible for storing the graphic objects created for a given graphic view. In simple cases, where graphic objects can be recreated when needed, it may not be necessary to store them in a graphic holder.

# graphic object

Graphic objects are the graphic representation of their associated *representation objects* in a graphic *view*. Graphic objects are optional. They are generally used to draw complex composite objects. Graphic objects are specific to a graphic view, but certain graphic object classes can be shared across graphic components.

# graphic view

A graphic view delimits a portion of the screen where the *representation objects* held by the model are drawn.

See graphic object, view.

# group

A predefined business object. A group is a container that holds a set of network elements or links. Groups are used to present a set of network resources grouped logically or geographically.

### handler

The handler is an optional way of controlling the *data source* and *adapters*. When used, the handler is responsible for handling requests coming from its associated graphic component that affect back-end data.

See equipment component, network component.

# image repository service

A context service used to load all IBM® ILOG® JViews TGO images.

# impact alarm

Impact alarms are used in combination with alarm propagation. An impact alarm corresponds to a propagated alarm, reported by a network element, but carried by another element.

### interactor

Interactors translate user gestures and keystrokes into actions to be performed, and more specifically into Swing action invocations. IBM® ILOG® JViews TGO provides two types of interactor: view interactors that operate on the view as a whole and object interactors that apply to each object contained in the view individually.

### **JNDI**

Java Naming and Directory Interface. JNDI is an API specified in Java that provides naming and directory functionality to applications written in Java. Naming and directory services provide network-wide sharing of a variety of information about users, machines, networks, services, and applications.

### **LED**

A predefined business object. An LED (Light-Emitting Diode) shows the condition of an item of hardware or software by emitting a colored light.

### link

A predefined business object. A link represents a physical connection between two network elements. Links are used to display the transmission elements making up the network lines.

### link bundle

A predefined business object. The link bundle object is a link container that you can collapse or expand.

A set of multiple physical point-to-point links between a given pair of systems, combined together into a single logical link with greater bandwidth than any of the constituent

component links. The technique of link bundling can be used to increase bidirectional bandwidth, and for redundancy and load balancing.

# link factory

The link factory transforms business objects that are links into representation objects that are instances of <code>llpNetworkLink</code>.

See node factory.

### link set

A predefined business object. A link set is used to represent a collection of links between network resources, laid out in a specific order with a specific distance.

### load on demand

A feature supported by the network, the equipment and the tree components. It is implemented according to the *expansion strategy*. It means that the graphic representation of a business object is only created when the parent object is expanded.

# Misc state dictionary

A dictionary of secondary states that can be used to complement OSI, Bellcore or SNMP standards.

See  $Bellcore\ state\ dictionary,\ OSI\ state\ dictionary\ SNMP\ state\ dictionary,\ SONET\ state\ dictionary.$ 

### model

Stores the application objects to be represented in the view. In IBM® ILOG® JViews TGO, this role is carried out by the *representation model*.

See MVC.

### **MVC**

The MVC (Model View Controller) architecture is an object-oriented pattern used in user interface design to separate the application object (model) from the way it is represented to the user (view) and from the way in which the user controls it (controller).

See controller, representation model, view.

# network component

The network component is one of the four graphic components supplied with IBM® ILOG® JViews TGO. It can display all kinds of IBM® ILOG® JViews TGO objects: network elements, links, groups, polylines, off-page connectors, cards, card carriers, shelves, ports, LEDs. The network component encapsulates the MVC architecture.

### network element

A predefined business object. A network element is any kind of shelf-based telecom or data-communication equipment (such as a switch, a multiplexer, a cross connect system), outside plant equipment (such as a coax nodes), or peripheral equipment (terminal or printer).

# node factory

The node factory transforms business objects other than links into representation objects that are instances of <code>llpNetworkNode</code>.

See link factory.

# object interactor

An object interactor listens to all user events occurring on a graphic object and sets off the corresponding Swing actions.

See interactor.

# off-page connector

A predefined business object. An off-page connector (OPC) can be used in place of a network node to show that the incoming link extends outside the displayed view.

# **OSI state dictionary**

A dictionary of telecommunication object states based on the OSI (Open System Interconnection) standard specified in *ISO/IEC 10164-2, ITU-T X.731 — State Management Function*.

# outstanding alarms

Outstanding alarms on a managed object include the new and the acknowledged alarms but not the cleared alarms.

# partial network element

A partial network element is an abstraction which denotes a network element that is only part of the real-world network element.

# passive device

A predefined business object. A passive device does not have a specific object state and does not report information about its current states and alarms.

# Performance state dictionary

A dictionary of secondary state values that can be used to complement any other standard state system such as OSI, Bellcore, SNMP, or SONET.

See Bellcore state dictionary, OSI state dictionary, SNMP state dictionary, SONET state dictionary.

# plinth

A relief rectangle added to a group or link to show the alarm count and possibly additional information.

# port

A predefined business object. A port connects a card to an external device.

# predefined business object

A business object provided by IBM® ILOG® JViews TGO and specifically designed to help you build high-quality, user-friendly user interfaces in the domain of telecom network management.

# property

(CSS.) A stylistic parameter that can be implemented through CSS.

# pseudoclass

Used in CSS *selectors* to allow information external to the source, such as whether an anchor has been visited or not, to classify elements.

# pseudoelement

Used in CSS selectors to handle typographical items rather than structural items.

### raw alarm

An alarm reported by a network element and carried by this element.

### renderer

A renderer draws a graphic object based on the information retrieved from its associated representation object and business object, if any, using graphic specifications from styles and visual dictionaries. There are two types of renderer: those that implement the default Swing renderer interfaces (only for table and tree) and those that build a graphic object.

# representation model

A representation model is a container for *representation objects*. It is used to produce the graphic objects in the view. The representation model manages the behavior and data of the application domain, responds to requests for information about its state (coming usually from the view), and responds to instructions to change its state (usually issued by the controller).

# representation object

A representation object provides the minimal data and structure information required for generating *graphic objects*, but is totally independent of a particular graphic rendering. More specifically, it does not contain graphic-related information. A representation object is specifically designed to work with a particular graphic component (table, tree, network, and so on) for which it provides a default implementation. A representation object can be linked to a business object, if any, but not necessarily.

See representation model.

### rule

(CSS.) A selector and its declarations.

# SAN state dictionary

A dictionary of secondary state values that can be used to complement any other standard state system such as OSI, Bellcore, SNMP, or SONET.

See Bellcore state dictionary, OSI state dictionary, SNMP state dictionary, SONET state dictionary.

### selector

A condition that is matched against objects from the business model. Selectors allow you to customize objects according to their business class or attributes.

### shelf

A predefined business object. A part of a shelf-based telecommunication item of equipment used to hold cards.

### shortcut network element

A shortcut network element is an abstaction denoting an object that is only a reference to an existing network element.

# SNMP state dictionary

A dictionary of telecommunication object states based on the SNMP (Simple Network Management Protocol) standard specified in RFC 1213 — Management Information Base for Network Management of TCP/IP based internets: MIB-II.

# SONET state dictionary

A dictionary of transport link states based on the SONET (Synchronous Optical Network) standard.

# specificity

The weighting of the priority of a rule in CSS in accordance with the number of components in its selector.

# state dictionaries

To describe the state and alarm conditions of a telecom object, IBM® ILOG® JViews TGO provides several state dictionaries based on worldwide standards. The development of these dictionaries is based on current telecom standards combined with hands-on experience.

### static class

A Java<sup>™</sup> class defined at compilation time.

See dynamic attribute model.

# style sheet

A collection of *rules* for controlling the presentation of Web pages in a precise manner. See *CSS2*.

### subnetwork

A subnetwork allows you to create applications that display a network inside another network. It is created automatically when you define a containment relationship between objects in the data source. A subnetwork can be displayed collapsed or expanded in the network component.

# subobject

(Styling) An object that is created during the application of a declaration in a CSS style sheet, by virtue of a declaration value of the form <code>@#identifier</code>, <code>@=identifier</code>, or <code>@+identifier</code>. It is styled through the same CSS style sheet, although it is not contained in the original CSS model.

# **SWT**

The Standard Widget Toolkit (SWT) is the window toolkit of the Eclipse® development environment and the Eclipse Rich Client Platform (RCP).

# synchronization strategy

A *context* service that makes it possible to access shared resources simultaneously with a choice of synchronization schemes.

# table component

The table component is one of the four graphic components provided in IBM® ILOG® JViews TGO. It displays objects in rows and their attributes in columns. The table component encapsulates the MVC architecture.

### thin client

A very light client application that can be run inside a web browser.

### trap state

A trap represents something unusual that occurs in an object.

# tree component

The tree component is one of the four graphic components provided in IBM® ILOG® JTGO. It displays a hierarchical view of the objects. The tree component encapsulates the MVC architecture.

# type converter

A context service that is mainly used to read and write XML files that contain data source information. All the attributes of business objects are converted using this service.

### **URL** access service

A context service that turns relative URLs into absolute URLs or pathnames. It can be used to deploy applications and applets without hardcoding pathnames or URLs. It can also be used to access configuration files, data source files and resource files.

### view

The view manages the visual display of the data represented by the model.

See graphic view, MVC.

### view interactor

A view interactor listens to all user events occurring on a view and dispatches intercepted events to object interactors.