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// ==================================================================
// CIM_PrintChannel
// ==================================================================

   [Experimental, Version ( "2.15.0" ), Description (
       "Subunit: Channel on a printer (print device). Each channel is "
       "characterized by a unique protocol stack and/or addressing. "
       "The channel may also have printer dependent features that are "
       "associated with a printing language.") ,
    UMLPackagePath]
class CIM_PrintChannel : CIM_ManagedElement {

      [Key, Description (
          "The CreationClassName of the scoping printer. The "
          "OutputTray is defined in the context of a CIM_Printer, "
          "where it is hosted or to which it applies."),
       MinLen ( 0 ), MaxLen ( 255 )]
   string PrinterCreationClassName;

      [Key, Description (
          "An identifying name of the scoping Printer. The OutputTray "
          "is defined in the context of a CIM_Printer, where it is "
          "hosted or to which it applies."),
       MinLen ( 0 ), MaxLen ( 255 ),
       ModelCorrespondence { "CIM_Printer.PrinterName" }]
   string PrinterName;

      [Key, Description (
          "Indicates the name of the class or the subclass used in the "
          "creation of an instance. When used with the other key "
          "properties of this class, it allows all instances of this "
          "class and its subclasses to be uniquely identified."),
       MinLen ( 0 ), MaxLen ( 255 )]
   string CreationClassName;

      [Key, Description (
          "A unique value used by the printer to identify this data "
          "channel. Although these values may change due to a major "
          "reconfiguration of the device (e.g., the addition of new "
          "data channels to the printer), values SHOULD remain stable "
          "across successive printer power cycles."),
       MinValue ( 1 ), MaxValue ( 65535 ),
       MappingStrings { "MIB.IETF|Printer-MIB.prtChannelIndex" }]
   uint32 Id;

      [Description (
          "The type of this print data channel. This property provides "
          "the linkage to channel type-specific classes that may "
          "(conceptually) extend the CIM_PrintChannel class with "
          "additional details about that channel."),
       ValueMap { "1", "3", "4", "5", "6", "7", "8", "9", "10", "11",
          "12", "13", "14", "15", "16", "17", "18", "19", "20", "21",
          "22", "23", "24", "25", "26", "27", "28", "29", "30", "31",
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            "32", "33", "34", "35", "36", "37", "38", "39", "40", "41",
            "42", "43", "44", "45" },
         Values { "Other", "ChSerialPort", "ChParallelPort",
            "ChIEEE1284Port", "ChSCSIPort", "ChAppleTalkPAP",
            "ChLPDServer", "ChNetwareRPrinter", "ChNetwarePServer",
            "ChPort9100", "ChAppSocket", "ChFTP", "ChTFTP",
            "ChDLCLLCPort", "ChIBM3270", "ChIBM5250", "ChFax",
            "ChIEEE1394", "ChTransport1", "ChCPAP",
            "ChDCERemoteProcCall", "ChONCRemoteProcCall", "ChOLE",
            "ChNamedPipe", "ChPCPrint", "ChServerMessageBlock", "ChDPMF",
            "ChDLLAPI", "ChVxDAPI", "ChSystemObjectManager", "ChDECLAT",
            "ChNPAP", "ChUSB", "ChIRDA", "ChPrintXChange", "ChPortTCP",
            "ChBidirPortTCP", "ChUNPP", "ChAppleTalkADSP", "ChPortSPX",
            "ChPortHTTP", "ChNDPS", "ChIPP", "ChSMTP" },
         MappingStrings { "MIB.IETF|Printer-MIB.prtChannelType",
            "MIB.IETF|IANA-PRINTER-MIB.PrtChannelTypeTC" }]
      uint32 Type;

         [Description (
            "A free-form string that describes the type of channel when "
            "the value of the Type property is equal to 1 (Other)."),
          MinLen ( 0 ), MaxLen ( 255 )]
      string OtherType;

         [Description (
            "The version of the protocol used on this channel. The "
            "format used for version numbering depends on "
            "CIM_PrintChannel.Type."),
          MinLen ( 0 ), MaxLen ( 63 ),
          MappingStrings {
            "MIB.IETF|Printer-MIB.prtChannelProtocolVersion" }]
      string ProtocolVersion;

         [Write, Description (
            "The value of CIM_PrintInterpreter.Id corresponding to the "
            "Control Language Interpreter for this channel. This "
            "interpreter defines the syntax used for control functions, "
            "such as querying or changing environment variables and "
            "identifying job boundaries (e.g., PJL, PostScript, NPAP). A "
            "value of zero indicates that there is no current Job "
            "Control Language Interpreter for this channel."),
          MinValue ( 0 ), MaxValue ( 65535 ),
          MappingStrings {
            "MIB.IETF|Printer-MIB.prtChannelCurrentJobCntlLangIndex" }]
      uint32 CurrentJobCntlLangId;

         [Write, Description (
            "The value of CIM_PrintInterpreter.Id corresponding to the "
            "Page Description Language Interpreter for this channel. "
            "This interpreter defines the default Page Description "
            "Language interpreter to be used for the print data unless "
            "the Control Language is used to select a specific "
            "interpreter (e.g., PCL, PostScript Language, auto-sense). A "
            "value of zero indicates that there is no default page "
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            "description language interpreter for this channel."),
         MinValue ( 0 ), MaxValue ( 65535 ),
         MappingStrings {
            "MIB.IETF|Printer-MIB.prtChannelDefaultPageDescLangIndex" }]
      uint32 DefaultPageDescLangId;

         [Write, Description (
            "The value of ifIndex in the ifTable - see the Interfaces "
            "Group MIB [RFC2863] which corresponds to this channel. When "
            "more than one row of the ifTable is relevant, this is the "
            "index of the row representing the topmost layer in the "
            "interface hierarchy. A value of zero indicates that no "
            "interface is associated with this channel."),
         MappingStrings { "MIB.IETF|Printer-MIB.prtChannelIfIndex" }]
      uint32 InterfaceId;

         [Description (
            "Status: Assessment of the availability of this printer "
            "subunit."),
         ValueMap { "1", "2", "3", "4", "5", "6", "7" },
         Values { "Unknown", "AvailableIdle", "AvailableStandby",
            "AvailableActive", "AvailableBusy", "UnavailableOnRequest",
            "UnavailableBroken" },
         MappingStrings { "MIB.IETF|Printer-MIB.PrtSubUnitStatusTC" }]
      uint32 StatusAvailability;

         [Description (
            "Status: If true, there are currently non-critical alerts on "
            "this printer subunit."),
         MappingStrings { "MIB.IETF|Printer-MIB.PrtSubUnitStatusTC" }]
      boolean StatusNonCriticalAlerts;

         [Description (
            "Status: If true, there are currently critical alerts on "
            "this printer subunit."),
         MappingStrings { "MIB.IETF|Printer-MIB.PrtSubUnitStatusTC" }]
      boolean StatusCriticalAlerts;

         [Description (
            "Status: If true, the current state is offline on this "
            "printer subunit."),
         MappingStrings { "MIB.IETF|Printer-MIB.PrtSubUnitStatusTC" }]
      boolean StatusOffline;

         [Description (
            "Status: If true, the current state is transitioning from "
            "one value to another on this printer subunit."),
         MappingStrings { "MIB.IETF|Printer-MIB.PrtSubUnitStatusTC" }]
      boolean StatusTransitioning;

         [Description (
            "Auxiliary information to allow a printing application to "
            "use the channel for data submission to the printer. An "
            "application capable of using a specific channel type should "
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163             "be able to use the combined information from the channel "
164             "information and other channel and interface properties to "
165             "'bootstrap' its use of the channel. channel information is "
166             "not intended to provide a general channel description, nor "
167             "to provide information that is available once the channel "
168             "is in use. The encoding and interpretation of the channel "
169             "information property is specific to channel type. The "
170             "description of each channel type enum value for which "
171             "channel information is defined specifies the appropriate "
172             "encoding and interpretation, including interaction with "
173             "other properties. For channel types that do not specify a "
174             "channel information value, its value shall be null (0 "
175             "length). When a new channel type enumeration value is "
176             "registered, its accompanying description must specify the "
177             "encoding and interpretation of the channel information "
178             "value for the channel type. channel information semantics "
179             "for an existing channel type may be added or amended in the "
180             "same manner as described in section 2.4.1 for type 2 "
181             "enumeration values. The channel information specifies "
182             "values for a collection of channel attributes, represented "
183             "as text according to the following rules: 1. The channel "
184             "information is not affected by localization. 2. The channel "
185             "information is a list of entries representing the attribute "
186             "values. Each entry consists of the following items, in "
187             "order: a. A keyword, composed of alphabetic characters "
188             "(A-Z, a-z) represented by their UCS-2 [ISO10646] codes, "
189             "that identifies a channel attribute, b. The UCS-2 code for "
190             "an Equals Sign (=) (0x003d) to delimit the keyword, c. A "
191             "data value encoded using rules specific to the channel type "
192             "to with the channel information applies which must in no "
193             "case allow a UCS-2 Line Feed (0x000d), d. the UCS-2 code "
194             "for a Line Feed (0x000d) to delimit the data value. No "
195             "other octets shall be present. Keywords are case-sensitive. "
196             "Conventionally, keywords are capitalized (including each "
197             "word of a multi-word keyword) and since they occupy space "
198             "in the channel information, they are kept short. 3. If a "
199             "channel attribute has multiple values, it is represented by "
200             "multiple entries with the same keyword, each specifying one "
201             "value. Otherwise, there shall be at most one entry for each "
202             "attribute. 4. By default, entries may appear in any order. "
203             "If there are ordering constraints for particular entries, "
204             "these must be specified in their definitions. 5. The "
205             "channel information value by default consists of text "
206             "represented by UCS-2 character codes. However, other "
207             "representations may be specified: a. In cases where the "
208             "channel information value contains information not normally "
209             "coded in textual form, whatever symbolic representation is "
210             "conventionally used for the information should be used for "
211             "encoding the channel information value. (For instance, a "
212             "binary port value might be represented as a decimal number "
213             "using UCS-2 codes.) Such encoding must be specified in the "
214             "definition of the value. b. The value MUST NOT contain "
215             "textual information in a character set other than UCS-2 "
216             "(per CIM rules for 'string' datatype). 6. For each channel "
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            "type for which channel information entries are defined, the "
            "descriptive text associated with the channel type "
            "enumeration value shall specify the following information "
            "for each entry: Title: Brief description phrase, e.g.: "
            "'Port name', 'Service Name', etc. Keyword: The keyword "
            "value, e.g.: 'Port' or 'Service' Syntax: The encoding of "
            "the entry value if it cannot be directly represented by "
            "UCS-2. Status: 'Mandatory', 'Optional', or 'Conditionally "
            "Mandatory' Multiplicity: 'Single' or 'Multiple' to indicate "
            "whether the entry may be present multiple times. "
            "Description: Description of the use of the entry, other "
            "information required to complete the definition (e.g.: "
            "ordering constraints, interactions between entries). "
            "Applications that interpret channel information should "
            "ignore unrecognized entries, so they are not affected if "
            "new entry types are added."),
        MinLen ( 0 ), MaxLen ( 255 ),
        MappingStrings { "MIB.IETF|Printer-MIB.prtChannelInformation",
            "MIB.IETF|IANA-PRINTER-MIB.PrtChannelTypeTC" }]
    string Information;
};

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