```
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// <change cr="CIMCoreCR00752.000" type ="change">Update of
// descriptions based on Tech Edit review.</
// <change cr="ArchCR00066.004" type="add">Add UmlPackagePath
// qualifier values to CIM Schema.</change>
// <change cr="CIMCoreCR00856" type ="change'>Update the
// description of the class and the properties descriptions
// and MappingStrings.</
// <change cr="ArchCR00089.003" type="add">Add PUnit qualifier values
// to Units qualifier values.</change>
// ===================================================================
//  CIM_PrintJob
// ===================================================================
   [Version ( "2.29.0" ),
    UMLPackagePath ( "CIM::Device::Printing" ),
    Description (
       "Description of a print request that is either waiting on a "
       "Queue for a Printer to become available or in the process of "
       "being output on a Printer, or that has previously been printed "
       "on a Printer. PrintJobs are weak to their current Queue, or to "
       "the last Queue that held them. The ABNF for CIM references to "
       "PWG Standards and MIBs is in the directory "
       "\'ftp://ftp.pwg.org/pub/pwg/general/process\' in the file "
       "\'pwg-cim-references-format-20060309.txt\'. An example for a "
       "MappingStrings reference to a PWG Standard is "
       "\'PWG5101-1.PWG|Section 4 Media Color Names\'. An example for "
       "a MappingStrings reference to a PWG MIB is "
       "\'MIB.PWG|PWG-IMAGING-COUNTER-MIB.icMonitorCompletedJobs\'." )]
class CIM_PrintJob : CIM_Job {

      [Key, Description (
          "The CreationClassName of the scoping System." ),
       MaxLen ( 256 ),
       Propagated ( "CIM_PrintQueue.SystemCreationClassName" )]
   string SystemCreationClassName;

      [Key, Description ( "The Name of the scoping System." ),
       MaxLen ( 256 ),
       MappingStrings { "MIB.IETF|SNMPv2-MIB.sysName" },
       Propagated ( "CIM_PrintQueue.SystemName" )]
   string SystemName;

      [Key, Description (
          "The CreationClassName of the scoping Queue." ),
       MaxLen ( 256 ),
       Propagated ( "CIM_PrintQueue.CreationClassName" )]
   string QueueCreationClassName;

      [Key, Description ( "The Name of the scoping Queue." ),
       MaxLen ( 256 ),
       MappingStrings {
          "MIB.IETF|Job-Monitoring-MIB.jmGeneralJobSetName",
          "MIB.IETF|Job-Monitoring-MIB.queueNameRequested",
          "RFC2911.IETF|Job.output-device-assigned" },
```

```
        Propagated ( "CIM_PrintQueue.Name" )]
    string QueueName;

       [Override ( "JobStatus" ),
        Description (
           "The inherited JobStatus is used to provide additional "
           "information about the status of a PrintJob beyond that "
           "enumerated by PrintJobStatus." ),
        MappingStrings { "MIB.IETF|Job-Monitoring-MIB.jmJobState",
           "MIB.IETF|Job-Monitoring-MIB.jmJobStateReasons1",
           "RFC2911.IETF|Job.job-state",
           "RFC2911.IETF|Job.job-state-reasons",
           "RFC2911.IETF|Job.job-state-message" },
        ModelCorrespondence { "CIM_PrintJob.PrintJobStatus" }]
    string JobStatus;

       [Key, Description (
           "Uniquely identifies this Job within its scoping Queue, "
           "but NOT across different Queues or PrintServices." ),
        MappingStrings { "MIB.IETF|Job-Monitoring-MIB.jmJobIndex",
           "MIB.IETF|Job-Monitoring-MIB.jmJobSubmissionID",
           "RFC2911.IETF|Job.job-id" }]
    string JobID;

       [Deprecated { "No Value" },
        Description (
           "Note: The use of this free-form string property is "
           "deprecated in lieu of the more semantically rich "
           "CIM_JobSettingData class inherited from CIM_Job." )]
    string SchedulingInformation;

       [Description (
           "Specifies the size of the PrintJob (as a byte stream) in "
           "units of Kbytes." ),
        Units ( "KiloBytes" ),
        MappingStrings {
           "MIB.IETF|Job-Monitoring-MIB.jmJobKOctetsProcessed",
           "RFC2911.IETF|Job.job-k-octets" },
        ModelCorrespondence { "CIM_Printer.MaxSizeSupported",
           "CIM_PrintServiceCapabilities.MaxJobSize",
           "CIM_PrintQueue.MaxJobSize" },
        PUnit ( "byte * 10^3" )]
    uint32 JobSize;

       [Deprecated { "CIM_PrintJob.MimeTypes" },
        Description (
           "Note: The use of this property has been deprecated, due "
           "to ambiguity. Instead use MimeTypes. \n"
           "Enumerated print languages are only available in the IETF "
           "Printer MIB v1/v2 (RFC 1759/3805) and are not available in "
           "open standard print protocols (i.e., no known mapping). \n"
           "Deprecated description: \n"
           "Specifies the print language that is used by this Job. \n"
           "Note: For legacy compatiblity reasons, this property is NOT "
```

```
109             "exactly aligned (in order of values) with the authoritative "
110             "PrtInterpreterLangFamilyTC in the IANA Printer MIB, unlike "
111             "the newer property PrintInterpreter.LangType (which is "
112             "exactly aligned with the IANA Printer MIB)." ),
113          ValueMap { "1", "2", "3", "4", "5", "6", "7", "8", "9", "10",
114             "11", "12", "13", "14", "15", "16", "17", "18", "19",
115             "20", "21", "22", "23", "24", "25", "26", "27", "28",
116             "29", "30", "31", "32", "33", "34", "35", "36", "37",
117             "38", "39", "40", "41", "42", "43", "44", "45", "46",
118             "47", "48", "50", "51", "52", "53", "54", "55", "56",
119             "57", "58", "59", "60", "61", "62", "63", "64", "65",
120             "66", "67", "68", "69", ".." },
121          Values { "Other", "Unknown", "PCL", "HPGL", "PJL", "PS",
122             "PSPrinter", "IPDS", "PPDS", // 10
123             "EscapeP",
124             "Epson", "DDIF", "Interpress", "ISO6429", "Line Data",
125             "MODCA", "REGIS", "SCS", "SPDL",
126             // 20
127             "TEK4014", "PDS", "IGP", "CodeV",
128             "DSCDSE", "WPS", "LN03", "CCITT", "QUIC", "CPAP",
129             // 30
130             "DecPPL", "Simple Text", "NPAP", "DOC",
131             "imPress", "Pinwriter", "NPDL", "NEC201PL", "Automatic",
132             "Pages", // 40
133             "LIPS", "TIFF", "Diagnostic",
134             "CaPSL", "EXCL", "LCDS", "XES", "MIME", "TIPSI",
135             // 50
136             "Prescribe", "LinePrinter", "IDP", "XJCL",
137             "PDF", "RPDL", "IntermecIPL", "UBIFingerprint",
138             "UBIDirectProtocol", "Fujitsu", // 60
139             "PCLXL",
140             "ART", "CGM", "JPEG", "CALS1", "CALS2", "NIRS", "C4",
141             "XPS", "OpenXPS", "DMTF Reserved" },
142          MappingStrings {
143             "MIB.IETF|Printer-MIB.prtInterpreterLangFamily",
144             "MIB.IETF|IANA-PRINTER-MIB.PrtInterpreterLangFamilyTC",
145             "MIB.IETF|Job-Monitoring-MIB.documentFormat",
146             "PWG5100-7.PWG|Job.document-format-supplied" },
147          ModelCorrespondence { "CIM_Printer.LanguagesSupported",
148             "CIM_PrintService.LanguagesSupported",
149             "CIM_PrintJob.MimeTypes" }]
150       uint16 Language;
151
152          [Description (
153             "Specifies the MIME types that are used by the PrintJob." ),
154           ModelCorrespondence { "CIM_PrintJob.Language",
155             "CIM_Printer.MimeTypesSupported",
156             "CIM_PrintServiceSettings.DocumentFormat",
157             "CIM_PrintService.MimeTypesSupported" }]
158       string MimeTypes[];
159
160          [Description (
161             "A string that specifies the type of paper that is "
162             "required by this PrintJob. The values of the property "
```

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163             "SHOULD conform to the requirements of the PWG Media "
164             "Standardized Names specification [PWG5101.1], which "
165             "defines the normative values for this property. See "
166             "older Appendix B \'Media Size Names\' and Appendix C "
167             "\'Media Names\' of IETF Printer MIB v2 [RFC3805] which "
168             "list the values of standardized media names defined in "
169             "ISO DPA [ISO10175]." ),
170          MappingStrings { "PWG5101-1.PWG|Media Standardized Names",
171             "MIB.IETF|Job-Monitoring-MIB.mediumRequested",
172             "RFC2911.IETF|Job.media" },
173          ModelCorrespondence { "CIM_Printer.PaperTypesAvailable",
174             "CIM_PrintServiceSettings.Media",
175             "CIM_PrintService.PaperTypesAvailable" }]
176       string RequiredPaperType;
177
178          [Deprecated { "CIM_PrintJob.Finishings" },
179          Description (
180             "Note: The use of this property has been deprecated, due "
181             "to ambiguity. Instead use Finishings. \n"
182             "Enumerated finishings are not available in "
183             "open standard print protocols (i.e., no known mapping). \n"
184             "Deprecated description: \n"
185             "An array of integers that indicates the type of "
186             "finishing that is required by this Job. It is equivalent "
187             "to the Capabilities property that is provided by the "
188             "Printer." ),
189          ValueMap { "0", "1", "2", "3", "4", "5", "6", "7", "8", "9",
190             "10", "11", "12", "13", "14", "15", "16", "17", "18",
191             "19", "20", "21" },
192          Values { "Unknown", "Other", "Color Printing",
193             "Duplex Printing", "Copies", "Collation", "Stapling",
194             "Transparency Printing", "Punch", "Cover", "Bind",
195             "Black and White Printing", "One Sided",
196             "Two Sided Long Edge", "Two Sided Short Edge", "Portrait",
197             "Landscape", "Reverse Portrait", "Reverse Landscape",
198             "Quality High", "Quality Normal", "Quality Low" },
199          ArrayType ( "Indexed" ),
200          ModelCorrespondence { "CIM_Printer.Capabilities",
201             "CIM_PrintService.Capabilities" }]
202       uint16 Finishing[];
203
204          [Description (
205             "The number of physical copies of the output that will be "
206             "produced from this Job." ),
207          MappingStrings {
208             "MIB.IETF|Job-Monitoring-MIB.jobCopiesRequested",
209             "RFC2911.IETF|Job.copies" },
210          ModelCorrespondence { "CIM_Printer.MaxCopies",
211             "CIM_PrintServiceCapabilities.Copies",
212             "CIM_PrintServiceSettings.Copies" }]
213       uint32 Copies;
214
215          [Description (
216             "The resolution of the in Pixels per Inch for the Job in "
```

```
217             "the cross-feed direction, i.e., short-edge in portrait "
218             "feed mode." ),
219          Units ( "Pixels per Inch" ),
220          MappingStrings {
221             "MIB.IETF|Job-Monitoring-MIB.printerResolutionRequested",
222             "RFC2911.IETF|Job.printer-resolution" },
223          ModelCorrespondence { "CIM_Printer.HorizontalResolution",
224             "CIM_PrintServiceCapabilities.Resolution",
225             "CIM_PrintServiceSettings.Resolution" },
226          PUnit ( "pixel / inch" )]
227       uint32 HorizontalResolution;
228
229          [Description (
230             "The resolution in Pixels per Inch for the Job in the "
231             "feed direction, i.e., long-edge in portrait feed mode." ),
232          Units ( "Pixels per Inch" ),
233          MappingStrings {
234             "MIB.IETF|Job-Monitoring-MIB.printerResolutionRequested",
235             "RFC2911.IETF|Job.printer-resolution" },
236          ModelCorrespondence { "CIM_Printer.VerticalResolution",
237             "CIM_PrintServiceCapabilities.Resolution",
238             "CIM_PrintServiceSettings.Resolution" },
239          PUnit ( "pixel / inch" )]
240       uint32 VerticalResolution;
241
242          [Description (
243             "Specifies the character set and encoding method that "
244             "should be used by the Printer for the management of this "
245             "Job. The strings should conform to the semantics and "
246             "syntax that are specified by section 4.1.2 'Charset "
247             "parameter' in RFC 2046 (MIME Part 2) and contained in "
248             "the IANA character-set registry. Examples include "
249             "'utf-8', 'us-ascii', and 'iso-8859-1'." ),
250          MappingStrings {
251             "MIB.IETF|Job-Monitoring-MIB.jobCodedCharSet",
252             "MIB.IETF|IANA-CHARSET-MIB.IANACharset",
253             "RFC2911.IETF|Job.attributes-charset" },
254          ModelCorrespondence { "CIM_Printer.CharSetsSupported",
255             "CIM_PrintServiceCapabilities.Charset" }]
256       string CharSet;
257
258          [Description (
259             "Identifies the language that should be used by the "
260             "Printer for the management of this Job. The specified "
261             "value should conform to RFC 5646. For example, 'en' is "
262             "used for English." ),
263          MappingStrings {
264             "MIB.IETF|Job-Monitoring-MIB.jobNaturalLanguageTag",
265             "RFC2911.IETF|Job.attributes-natural-language" },
266          ModelCorrespondence { "CIM_Printer.NaturalLanguagesSupported",
267             "CIM_PrintServiceCapabilities.NaturalLanguage" }]
268       string NaturalLanguage;
269
270          [Description (
```

```
271             "The number of print-stream pages that should be rendered "
272             "onto a single media sheet when the Printer outputs this "
273             "PrintJob." ),
274          MappingStrings { "RFC2911.IETF|Job.number-up" },
275          ModelCorrespondence { "CIM_Printer.MaxNumberUp",
276             "CIM_PrintServiceCapabilities.NumberUp",
277             "CIM_PrintServiceSettings.NumberUp" }]
278       uint32 NumberUp;
279
280          [Description (
281             "Describes the current state of this Job with respect to "
282             "the PrintQueue and the Printer. Additional information "
283             "can be specified in JobStatus. \n"
284             "1 (Other) means this Job is in some non-standard state. \n"
285             "2 (Unknown) means this Job is in an unknown state. \n"
286             "3 (Pending) maps to IPP job-state 'pending'. \n"
287             "4 (Blocked) maps to IPP job-state 'pending-held'. \n"
288             "5 (Completed) maps to IPP job-state 'completed'. \n"
289             "6 (Completed With Error) maps to "
290             "IPP job-state 'completed' in combination with "
291             "IPP job-state-reasons 'completed-with-errors'. \n"
292             "7 (Printing) maps to IPP job-state 'processing'. \n"
293             "8 (Processing Stopped) maps to "
294             "IPP job-state 'processing-stopped'. \n"
295             "9 (Canceled) maps to IPP job-state 'canceled'. \n"
296             "10 (Aborted) maps to IPP job-state 'aborted'." ),
297          ValueMap { "1", "2", "3", "4", "5", "6", "7", "8", "9", "10" },
298          Values { "Other", "Unknown", "Pending", "Blocked",
299             "Complete", "Completed With Error", "Printing",
300             "Processing Stopped", "Canceled", "Aborted" },
301          MappingStrings { "MIB.IETF|Job-Monitoring-MIB.jmJobState",
302             "RFC2911.IETF|Job.job-state" },
303          ModelCorrespondence { "CIM_PrintJob.TimeCompleted",
304             "CIM_PrintJob.JobStatus" }]
305       uint16 PrintJobStatus;
306
307          [Description (
308             "The time when this Job was completed. This value is "
309             "valid only if the PrintJobStatus has been assigned to "
310             "'Complete' or 'Completed With Error'." ),
311          MappingStrings {
312             "MIB.IETF|Job-Monitoring-MIB.jobCompletionTime",
313             "RFC2911.IETF|Job.date-time-at-completed" },
314          ModelCorrespondence { "CIM_PrintJob.PrintJobStatus" }]
315       datetime TimeCompleted;
316
317          [Description (
318             "Describes the job sheets that should be used when this "
319             "Job is output on the Printer. \n"
320             "Complete standard values are in the IANA IPP Registry. \n"
321             "Additional vendor or site values may also be used. \n"
322             "Standard values defined in IPP/1.1 (RFC 2911) include: \n"
323             "Value 'none' indicates no job start/end sheets. \n"
324             "Value 'standard' indicates one or more site-specific "
```

```
325             "standard job sheets." ),
326          MappingStrings { "RFC2911.IETF|Job.job-sheets" },
327          ModelCorrespondence { "CIM_Printer.AvailableJobSheets",
328             "CIM_PrintServiceCapabilities.JobSheets",
329             "CIM_PrintServiceSettings.JobSheets" }]
330       string RequiredJobSheets[];
331
332          [Description (
333             "Provides additional information, beyond Job Owner that "
334             "is inherited from CIM_Job, to identify the origins of "
335             "the PrintJob. This property could include information "
336             "such as the System, Application, or Process that created "
337             "the Job." ),
338          MappingStrings {
339             "MIB.IETF|Job-Monitoring-MIB.jobOriginatingHost",
340             "MIB.IETF|Job-Monitoring-MIB.submittingServerName",
341             "MIB.IETF|Job-Monitoring-MIB.submittingApplicationName",
342             "RFC2911.IETF|Job.job-originating-user-name" }]
343       string JobOrigination;
344
345          [Experimental, Description (
346               "Additional information about each document access error "
347               "encountered by the associated PrintService while "
348               "processing this PrintJob, e.g., "
349               "(404) http://example.com/telephone-list.pdf." ),
350           MappingStrings {
351               "RFC2911.IETF|Section 4.3.11 job-document-access-errors" },
352           ModelCorrespondence {
353               "CIM_PrintJob.NumberOfDocuments" }]
354        string DocumentAccessErrors[];
355
356          [Override ( "ElapsedTime" ),
357           Description (
358               "The processing elapsed time of this instance of PrintJob, "
359               "after the Job has completed. \n"
360               "Note: This property is NOT meaningful before PrintJob "
361               "completion." ),
362           MappingStrings {
363               "RFC2911.IETF|Section 4.3.14.3 time-at-completed",
364               "RFC2911.IETF|Section 4.3.14.7 date-time-at-completed" },
365           ModelCorrespondence {
366               "CIM_PrintJob.TimeCompleted" }]
367        datetime ElapsedTime;
368
369          [Required, Override ( "ElementName" ),
370           Description (
371               "The user-friendly name for this instance of PrintJob. "
372               "In addition, the user-friendly name can be used as an "
373               "index property for a search or query. (Note: The name "
374               "does not have to be unique within a namespace.) This "
375               "name shall be supplied by the client or generated by the "
376               "PrintService (if missing in job creation operation)." ),
377           MappingStrings {
378               "RFC2911.IETF|Section 4.3.5 job-name" }]
```

```
379       string ElementName;
380
381          [Experimental, Description (
382               "The array of named finishings for this PrintJob. \n"
383               "Complete standard values are in the IANA IPP Registry. \n"
384               "Standard values defined in IPP/1.1 (RFC 2911) include: \n"
385               "Value 'punch' means drill hole(s) in each Job copy. \n"
386               "Value 'staple' means put staple(s) in each Job copy." ),
387           MappingStrings {
388               "RFC2911.IETF|Section 4.2.6 finishings" },
389           ModelCorrespondence {
390               "CIM_PrintServiceCapabilities.Finishings",
391               "CIM_PrintServiceSettings.Finishings" }]
392       string Finishings[];
393
394          [Experimental, Description (
395               "The number of output impressions completed for this "
396               "instance of PrintJob." ),
397           MappingStrings {
398               "RFC2911.IETF|Section 4.3.17.2 job-impressions",
399               "RFC2911.IETF|Section 4.3.18.2 job-impressions-completed" },
400           ModelCorrespondence {
401               "CIM_PrintServiceCapabilities.MaxImpressions" }]
402       uint32 ImpressionsCompleted;
403
404          [Experimental, Description (
405               "The named job hold until for this PrintJob. \n"
406               "That is, the named time period when the PrintJob may be "
407               "scheduled. \n"
408               "Complete standard values are in the IANA IPP Registry. \n"
409               "Additional vendor or site values may also be used. \n"
410               "Standard values defined in IPP/1.1 (RFC 2911) include: \n"
411               "Value 'night' means local night (site-specific). \n"
412               "Value 'weekend' means local weekend (site-specific). \n"
413               "Value 'no-hold' means schedule PrintJob immediately." ),
414           MappingStrings {
415               "RFC2911.IETF|Section 4.2.2 job-hold-until" },
416           ModelCorrespondence {
417               "CIM_PrintServiceCapabilities.JobHoldUntil",
418               "CIM_PrintServiceSettings.JobHoldUntil" }]
419       string JobHoldUntil;
420
421          [Experimental, Description (
422               "The priority for this PrintJob. \n"
423               "Note: Weighted scale is *opposite* to Job.Priority. \n"
424               "The value 1 indicates the lowest possible priority. \n"
425               "The value 100 indicates the highest possible priority." ),
426           MinValue ( 1 ),
427           MaxValue ( 100 ),
428           MappingStrings {
429               "RFC2911.IETF|Section 4.2.1 job-priority" },
430           ModelCorrespondence {
431               "CIM_PrintServiceCapabilities.JobPriority",
432               "CIM_PrintServiceSettings.JobPriority" }]
```

```
433       uint32 JobPriority;
434
435          [Experimental, Description (
436               "The human-readable status messages for this instance of "
437               "PrintJob, e.g., 'Paused by operator at 12:04'." ),
438           MappingStrings {
439               "RFC2911.IETF|Section 4.3.10 job-detailed-status-messages",
440               "RFC2911.IETF|Section 4.3.9 job-state-message" },
441           ModelCorrespondence {
442               "CIM_PrintJob.JobStatus",
443               "CIM_PrintJob.PrintJobStatus" }]
444       string JobStatusMessage[];
445
446          [Experimental, Description (
447               "Unique URI for this PrintJob across all instances of "
448               "PrintQueue and across all instances of PrintService. \n"
449               "Value is assigned by associated PrintService when the "
450               "PrintJob is received." ),
451           MappingStrings {
452               "RFC2911.IETF|Section 4.3.1 job-uri" }]
453       string JobURI;
454
455          [Experimental, Description (
456               "A human-readable message to end users from the operator, "
457               "system administrator, or management software for this "
458               "instance of PrintJob." ),
459           MappingStrings {
460               "RFC2911.IETF|Section 4.3.16 job-message-from-operator" },
461           ModelCorrespondence {
462               "CIM_PrintService.MessageFromOperator",
463               "CIM_PrintService.NaturalLanguage",
464               "CIM_PrintJob.NaturalLanguage" }]
465       string MessageFromOperator;
466
467          [Experimental, Description (
468               "The URI for more info about this specific instance of "
469               "PrintJob. \n"
470               "This URI shall be generated as a factory default by the "
471               "manufacturer and may be changed out-of-band to a "
472               "site-specific URI by the system administrator." ),
473           MappingStrings {
474               "RFC2911.IETF|Section 4.3.4 job-more-info" },
475           ModelCorrespondence {
476               "CIM_PrintService.MoreInfoURI" }]
477       string MoreInfoURI;
478
479          [Experimental, Description (
480               "The multiple document handling for this PrintJob. \n"
481               "That is, the named policy for the handling of finishing,"
482               "the placement of one or more input logical pages onto "
483               "output impressions, and multiple copies in a PrintJob "
484               "with two or more documents. \n"
485               "Complete standard values are in the IANA IPP Registry. \n"
486               "Standard values defined in IPP/1.1 (RFC 2911) include: \n"
```

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487             "Value 'single-document' means apply finishing to multiple "
488             "document sets (i.e., each copy of the PrintJob). \n"
489             "Value 'single-document-new-sheet' means the same behavior "
490             "as 'single-document' plus each document must start on a "
491             "new sheet (i.e., a front side in duplex)." ),
492         MappingStrings {
493             "RFC2911.IETF|Section 4.2.4 multiple-document-handling" },
494         ModelCorrespondence {
495             "CIM_PrintServiceCapabilities.MultipleDocumentHandling",
496             "CIM_PrintServiceCapabilities.MultipleDocumentJobs",
497             "CIM_PrintServiceSettings.MultipleDocumentHandling" }]
498     string MultipleDocumentHandling;
499
500        [Experimental, Description (
501             "The number of input documents in this PrintJob." ),
502         MappingStrings {
503             "RFC2911.IETF|Section 4.3.12 number-of-documents" },
504         ModelCorrespondence {
505             "CIM_PrintJob.DocumentAccessErrors" }]
506     uint32 NumberOfDocuments;
507
508        [Experimental, Description (
509             "The orientation requested for this PrintJob. \n"
510             "Complete standard values are in the IANA IPP Registry. \n"
511             "Standard values defined in IPP/1.1 (RFC 2911) include: \n"
512             "Value 'portrait' means imaged across the short edge, "
513             "with no content rotation. \n"
514             "Value 'landscape' means imaged across the long edge, "
515             "with content rotated 90 degrees anticlockwise "
516             "from 'portrait'. \n"
517             "Value 'reverse-landscape' means imaged across the long "
518             "edge, with content rotated 90 degrees clockwise "
519             "from 'portrait'. \n"
520             "Value 'reverse-portrait' means imaged across the short "
521             "edge, with content rotated 180 degrees (opposite) "
522             "from 'portrait'." ),
523         MappingStrings {
524             "RFC2911.IETF|Section 4.2.10 orientation-requested" },
525         ModelCorrespondence {
526             "CIM_PrintServiceCapabilities.OrientationRequested",
527             "CIM_PrintServiceSettings.OrientationRequested" }]
528     string OrientationRequested;
529
530        [Experimental, Description (
531             "The assigned output device name(s) for this instance of "
532             "PrintJob." ),
533         MappingStrings {
534             "RFC2911.IETF|Section 4.3.13 output-device-assigned",
535             "PWG5100-7.PWG|Section 4.2.1 output-device",
536             "PWG5100-7.PWG|Section 4.2.1.3 output-device-actual" },
537         ModelCorrespondence {
538             "CIM_Printer.ElementName",
539             "CIM_PrintServiceCapabilities.OutputDevice" }]
540     string OutputDevice[];
```

```
541
542         [Experimental, Description (
543              "The input logical page ranges for this PrintJob. \n"
544              "That is, the set of input logical pages to be "
545              "included in the output. \n"
546              "Note: Each page range shall be specified as lower and "
547              "then higher decimal numbers separated by a colon (X:Y). \n"
548              "The set of page ranges shall be in ascending order, "
549              "e.g., '1:5', '7:10'. \n"
550              "The page ranges shall not overlap, so that a non-spooling "
551              "PrintService can process the PrintJob in a single pass." ),
552          MappingStrings {
553              "RFC2911.IETF|Section 4.2.7 page-ranges" },
554          ModelCorrespondence {
555              "CIM_PrintServiceCapabilities.PageRanges" }]
556      string PageRanges[];
557
558         [Experimental, Description (
559              "The print quality for impressions for this PrintJob. \n"
560              "Complete standard values are in the IANA IPP Registry. \n"
561              "Standard values defined in IPP/1.1 (RFC 2911) include: \n"
562              "Value 'draft' means lowest print quality. \n"
563              "Value 'normal' means normal print quality. \n"
564              "Value 'high' means highest print quality." ),
565          MappingStrings {
566              "RFC2911.IETF|Section 4.2.13 print-quality" },
567          ModelCorrespondence {
568              "CIM_PrintServiceCapabilities.PrintQuality",
569              "CIM_PrintServiceSettings.PrintQuality" }]
570      string PrintQuality;
571
572         [Experimental, Description (
573              "The number of output sheets completed for this "
574              "instance of PrintJob." ),
575          MappingStrings {
576              "RFC2911.IETF|Section 4.3.17.3 job-media-sheets",
577              "RFC2911.IETF|Section 4.3.18.3" },
578          ModelCorrespondence {
579              "CIM_PrintServiceCapabilities.MaxSheets" }]
580      uint32 SheetsCompleted;
581
582         [Experimental, Description (
583              "The imposition mode for impressions for this PrintJob. \n"
584              "That is, the policy for imposing input logical pages "
585              "onto output impressions (sides of selected media). \n"
586              "Complete standard values are in the IANA IPP Registry. \n"
587              "Standard values defined in IPP/1.1 (RFC 2911) include: \n"
588              "Value 'one-sided' means each successive input logical "
589              "page onto the same side of consecutive sheets of media. \n"
590              "Value 'two-sided-long-edge' means each consecutive pair "
591              "of input logical pages onto front and back sides of "
592              "consecutive sheets of media, with orientation for long "
593              "edge binding \n"
594              "Value 'two-sided-short-edge' means each consecutive pair "
```

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595                 "of input logical pages onto front and back sides of "
596                 "consecutive sheets of media, with orientation for short "
597                 "edge binding." ),
598             MappingStrings {
599                 "RFC2911.IETF|Section 4.2.8 sides" },
600             ModelCorrespondence {
601                 "CIM_PrintServiceCapabilities.Sides",
602                 "CIM_PrintServiceSettings.Sides" }]
603         string Sides;
604
605            [Override ( "StartTime" ),
606             Description (
607                 "The processing start time of this instance of PrintJob." ),
608             MappingStrings {
609                 "RFC2911.IETF|Section 4.3.14.2 time-at-processing",
610                 "RFC2911.IETF|Section 4.3.14.6 date-time-at-processing" }]
611         datetime StartTime;
612
613            [Override ( "TimeSubmitted" ),
614             Description (
615                 "The creation time of this instance of PrintJob." ),
616             MappingStrings {
617                 "RFC2911.IETF|Section 4.3.14.1 time-at-creation",
618                 "RFC2911.IETF|Section 4.3.14.5 date-time-at-creation" }]
619         datetime TimeSubmitted;
620
621
622     };
623
```