Global Identifiers and GeoLocation Attributes

Job Identifiers:

new

job-uuid (SM:JobUuid): The identifier for a job with a global scope. The identifier is unique for a Job across all service instances of any service type. The UUID URN namespace is specified in rfc4122. The format used for "job-uuid" is the string representation of a UUID as a URN. An example is "urn:uuid:a6b90f34-d0b1-1956 -7dec-009c4386fe3". The version (aka subtype) used is implementation specific. Version 1 (i.e. time based) is recommended.
Datatype: abstract:char[64], IPP:uri MaxLength=64, SM:xs:anyURI maxLen=64
Note: Both the local (i.e. job-id) and global (i.e. job-uuid) identifiers are mandatory. Legacy protocol mappings (e.g. IPP 1.1, WS-Print, LPR) require the local identifier.

Printer Identifiers:

new

printer-uuid (SM:ServiceUuid): The identifier for a Printer with a global scope. The identifier is unique across all service instances of any service type. The UUID URN namespace is specified in rfc4122. The format used for "printer-uuid" is the string representation of a UUID as a URN. An example is "urn:uuid:a6b90f34-d0b1-1956 -7dec-009c4386fe3". The version (aka subtype) used is implementation specific. Version 1 (i.e. time based) is recommended.
Datatype: abstract:char[64], IPP:uri, SM:xs:anyURI maxLen=64

Printer Location:

new

printer-geo-location (SM:ServiceGeoLocation, SM:SystemGeoLocation): This identifies the location of the associated device using the World Geodetic System 1984(WGS84). The means for expressing the location information is a "geo:" URI scheme [RFC5870]
Datatype: abstract:char[2048], IPP:uri, SM: anyURI maxLen=2048

references:

[WGS84]
World Geodetic System 1984, Last revised 2004, National Geospatial-Intelligence Agency,
<https://www1.nga.mil/ProductsServices/GeodesyGeophysics/WorldGeodeticSystem/Pages/default.aspx>

[RFC1876]
RFC1876: A Means for Expressing Location Information in the Domain Name System, January 1996, C. Davis, P. Vixie, T. Goodwin, I. Dickinson, <http://tools.ietf.org/rfc/rfc1876.txt>

RFC4122]
RFC4122: A Universally Unique IDentifier (UUID) URN Namespace, July 2005, P. Leach, M. Mealling, R. Salz, <http://tools.ietf.org/rfc/rfc4122.txt>

RFC5870]
RFC5870: A Uniform Resource Identifier for Geographic Locations ('geo' URI), June 2010, A. Mayrhofer, C. Spanring, <http://tools.ietf.org/rfc/rfc5870.txt>

Geolocation Example

2-Dimensional Location of my office printer

Google Map URL:

http://maps.google.com/maps?f=q&source=s_q&hl=en&geocode=&q=800+phillips+rd+webster+ny+14580&sll=37.0625,-95.677068&sspn=62.226996,106.962891&ie=UTF8&hq=&hnear=800+Phillips+Rd,+Webster,+Monroe,+New+York+14580&ll=43.220973,-77.417162&spn=0.001781,0.003264&t=h&z=19

Location representations:

Decimal Degrees (WGS84)

Latitude	Longitude
43.220973	-77.417162

Degrees, Minutes & Seconds

Latitude	Longitude
N43 13 15	W77 25 01

GPS

Latitude	Longitude
N 43 13.258	W 77 25.030

UTM

	X	Y
18N	303685	4788191

My office elevation:

128 meters (419 feet) above sea level

Size of Printer:

91 centimeter (3 feet)

Margin of error

183 centimeter (6 feet)

DNS LOC record (RFC1876)

Version = 0
Size = 18 (0x12) (encoded centimeter)
HorizontalPrecision = 34 (0x22) (encoded centimeter)
VerticalPrecision = 34 (0x22) (encoded centimeter)
Latitude = 2303079151 (0x8946, 0x32EF) (thousandths of a second of arc)) (2147483648 +(DecimalDegreeLatitude*60*60*1000)) (North is positive)
Longitude = 1868781865 (0x6F63, 0x5929)(thousandths of a second of arc) (2147483648-(DecimalDegreeLongitude*60*60*1000)) (West is negative)
Altitude = 10012800 (0x0098, 0xC880)(centimeter) (OfficeElevation+10000000)

GeoLocation (RFC5870)

geo:43.220973,-77.417162,128;u=1.83