



Service Discovery

Service Discovery Protocol (SDP)

Universally Unique Identifier (UUID) short forms

The *Bluetooth* Service Discovery Protocol (SDP) specification defines a way to represent a range of UUIDs (which are nominally 128-bits) in a shorter form. A reserved range of 2^{32} values can be represented using 32-bits (denoted uuid32). Of these, a sub-range of 2^{16} values can be represented using only 16 -bits (denoted uuid16). Any value in the 2^{32} range that is not assigned in this document is reserved pending future revisions of this document. In other words, no value in this range may be used except as specified in this or future revisions of this document . UUID values outside of this range can be allocated as described in [\[ISO-11578\]](#) for any purpose the allocator desires.

Base Universally Unique Identifier (UUID)

The Base UUID is used for calculating 128-bit UUIDs from 'short UUIDs' (uuid16 and uuid32) as described in the SDP Specification [See Service Discovery Protocol \(SDP\), Bluetooth SIG.](#)

Mnemonic	UUID
BASE_UUID	00000000-0000-1000-8000-00805F9B34FB

Protocols

Mnemonic	UUID size	Short UUID	Name	Ref
SDP	uuid16	0x0001	bt-sdp	See <i>Bluetooth</i> Service Discovery Protocol (SDP), Bluetooth SIG.
UDP	uuid16	0x0002		
RFCOMM	uuid16	0x0003	bt-rfcomm	See RFCOMM with TS 07.10, Bluetooth SIG.
TCP	uuid16	0x0004		
TCS-BIN	uuid16	0x0005	bt-tcs	See <i>Bluetooth</i> Telephony Control Specification / TCS Binary, Bluetooth SIG.
TCS-AT	uuid16	0x0006	modem	
OBEX	uuid16	0x0008	obex	
IP	uuid16	0x0009		

FTP	uuid16	0x000A	ftp	
HTTP	uuid16	0x000C	http	
WSP	uuid16	0x000E	wsp	
BNEP	uuid16	0x000F		BNEP
UPNP	uuid16	0x0010		ESDP
HIDP	uuid16	0x0011		See Human Interface Device Profile (HID), Bluetooth SIG
HardcopyControlChannel	uuid16	0x0012		See Hardcopy Cable Replacement Profile (HCRP), Bluetooth SIG
HardcopyDataChannel	uuid16	0x0014		See Hardcopy Cable Replacement Profile (HCRP), Bluetooth SIG
HardcopyNotification	uuid16	0x0016		See Hardcopy Cable Replacement Profile (HCRP), Bluetooth SIG
AVCTP	uuid16	0x0017		Audio/Video Control Transport Protocol, Bluetooth SIG
AVDTP	uuid16	0x0019		Audio/Video Distribution Transport Protocol, Bluetooth SIG
CMTTP	uuid16	0x001B	bt-cmtpp	CAPI Message Transport Protocol
UDI_C-Plane	uuid16	0x001D		See the Unrestricted Digital Information Profile [UDI], Bluetooth SIG
MCAPControlChannel	uuid16	0x001E	mcap-control	See Multi-Channel Adaptation Protocol (MCAP), Bluetooth SIG
MCAPDataChannel	uuid16	0x001F	mcap-data	See Multi-Channel Adaptation Protocol (MCAP), Bluetooth SIG
L2CAP	uuid16	0x0100	bt-l2cap	See Logical Link Control and Adaptation Protocol Specification, Bluetooth SIG.
		(Max value 0xFFFF)		

Table 1: Protocol Universally Unique Identifiers and Names**Service classes**

Mnemonic	UUID size	UUID	Profile [Ref #5]
ServiceDiscoveryServerServiceClassID	uuid16	0x1000	
BrowseGroupDescriptorServiceClassID	uuid16	0x1001	
PublicBrowseGroup	uuid16	0x1002	
SerialPort	uuid16	0x1101	See Generic Access Profile, Bluetooth SIG.

LANAccessUsingPPP	uuid16	0x1102	
DialupNetworking	uuid16	0x1103	See Dial-up Networking Profile, Bluetooth SIG.
IrMCSync	uuid16	0x1104	See Synchronization Profile, Bluetooth SIG.
OBEXObjectPush	uuid16	0x1105	See Object Push Profile, Bluetooth SIG.
OBEXFileTransfer	uuid16	0x1106	See File Transfer Profile, Bluetooth SIG.
IrMCSyncCommand	uuid16	0x1107	See Synchronization Profile, Bluetooth SIG.
HSP	uuid16	0x1108	See Headset Profile, Bluetooth SIG
CordlessTelephony	uuid16	0x1109	See Cordless Telephony Profile, Bluetooth SIG
AudioSource	uuid16	0x110A	Advanced Audio Distribution Profile, Bluetooth SIG
AudioSink	uuid16	0x110B	Advanced Audio Distribution Profile, Bluetooth SIG
A/V_RemoteControlTarget	uuid16	0x110C	Audio/Video Remote Control Profile, Bluetooth SIG
AdvancedAudioDistribution	uuid16	0x110D	Advanced Audio Distribution Profile, Bluetooth SIG
A/V_RemoteControl	uuid16	0x110E	Audio/Video Remote Control Profile, Bluetooth SIG
A/V_RemoteControlController	uuid16	0x110F	Audio/Video Remote Control Profile, Bluetooth SIG
Intercom	uuid16	0x1110	See Intercom Profile, Bluetooth SIG
Fax	uuid16	0x1111	See Fax Profile, Bluetooth SIG
Headset - AG	uuid16	0x1112	See Headset Profile, Bluetooth SIG
WAP	uuid16	0x1113	See Interoperability Requirements for <i>Bluetooth</i> as a WAP, Bluetooth SIG
WAP_CLIENT	uuid16	0x1114	See Interoperability Requirements for <i>Bluetooth</i> as a WAP, Bluetooth SIG
PANU	uuid16	0x1115	The Personal Area Networking profile for <i>Bluetooth</i> , Bluetooth SIG
NAP	uuid16	0x1116	The Personal Area Networking profile for <i>Bluetooth</i> , Bluetooth SIG
GN	uuid16	0x1117	The Personal Area Networking profile for <i>Bluetooth</i> , Bluetooth SIG

DirectPrinting	uuid16	0x1118	See Basic Printing Profile, Bluetooth SIG
ReferencePrinting	uuid16	0x1119	See Basic Printing Profile, Bluetooth SIG
Imaging	uuid16	0x111A	[IMAGING]
ImagingResponder	uuid16	0x111B	[IMAGING]
ImagingAutomaticArchive	uuid16	0x111C	[IMAGING]
ImagingReferencedObjects	uuid16	0x111D	[IMAGING]
Handsfree	uuid16	0x111E	Handsfree Profile, Bluetooth SIG
HandsfreeAudioGateway	uuid16	0x111F	Handsfree Profile, Bluetooth SIG
DirectPrintingReferenceObjectsService	uuid16	0x1120	See Basic Printing Profile, Bluetooth SIG
ReflectedUI	uuid16	0x1121	See Basic Printing Profile, Bluetooth SIG
BasicPrinting	uuid16	0x1122	See Basic Printing Profile, Bluetooth SIG
PrintingStatus	uuid16	0x1123	See Basic Printing Profile, Bluetooth SIG
HumanInterfaceDeviceService	uuid16	0x1124	See Human Interface Device, Bluetooth SIG
HardcopyCableReplacement	uuid16	0x1125	See Hardcopy Cable Replacement Protocol, Bluetooth SIG
HCR_Print	uuid16	0x1126	See Hardcopy Cable Replacement Protocol, Bluetooth SIG
HCR_Scan	uuid16	0x1127	See Hardcopy Cable Replacement Protocol, Bluetooth SIG
Common_ISDN_Access	uuid16	0x1128	See CAPI Message Transport Protocol, Bluetooth SIG
VideoConferencingGW	uuid16	0x1129	See Video Conferencing Profile (VCP), Bluetooth SIG
UDI_MT	uuid16	0x112A	[UDI]
UDI_TA	uuid16	0x112B	[UDI]
Audio/Video	uuid16	0x112C	See Video Conferencing Profile (VCP), Bluetooth SIG
SIM_Access	uuid16	0x112D	[SAP]
Phonebook Access - PCE	uuid16	0x112E	PBAP Service Class ID
Phonebook Access - PSE	uuid16	0x112F	PBAP Service Class ID
Phonebook Access	uuid16	0x1130	PBAP Profile ID
Headset - HS	uuid16	0x1131	<i>Bluetooth</i> Headset Profile, Bluetooth SIG
Message Access Server	uuid16	0x1132	<i>Bluetooth</i> Message Access Profile, Bluetooth SIG

Message Notification Server	uuid16	0x1133	<i>Bluetooth</i> Message Access Profile, Bluetooth SIG
Message Access Profile	uuid16	0x1134	<i>Bluetooth</i> Message Access Profile, Bluetooth SIG
PnPInformation	uuid16	0x1200	<i>Bluetooth</i> Device Identification, Bluetooth SIG
GenericNetworking	uuid16	0x1201	n/a
GenericFileTransfer	uuid16	0x1202	n/a
GenericAudio	uuid16	0x1203	n/a
GenericTelephony	uuid16	0x1204	n/a
UPNP_Service	uuid16	0x1205	[ESDP] and possible future profiles.
UPNP_IP_Service	uuid16	0x1206	[ESDP] and possible future profiles.
ESDP_UPNP_IP_PAN	uuid16	0x1300	[ESDP]
ESDP_UPNP_IP_LAP	uuid16	0x1301	[ESDP]
ESDP_UPNP_L2CAP	uuid16	0x1302	[ESDP]
VideoSource	uuid16	0x1303	See Video Distribution Profile (VDP), Bluetooth SIG
VideoSink	uuid16	0x1304	See Video Distribution Profile (VDP), Bluetooth SIG
VideoDistribution	uuid16	0x1305	Video Distribution Profile (VDP), Bluetooth SIG
HDP	uuid16	0x1400	See Health Device Profile (HDP), Bluetooth SIG
HDP Source	uuid16	0x1401	See Health Device Profile (HDP), Bluetooth SIG
HDP Sink	uuid16	0x1402	See Health Device Profile (HDP), Bluetooth SIG
		(Max value 0xFFFF)	

Table 2: Service Class Identifiers and Names

[Ref #5: If the specified Service Class directly and exactly implies a certain Profile, the Profile is indicated here (i.e. for concrete Service Classes). Leave empty for abstract Service Classes.]

The Profile column in Table 4.2 indicates which Service Class identifiers directly correspond to a *Bluetooth* Profile. It is not allowed to use the Service Class UUID unless the service complies with the specified Profile. These UUIDs might also appear as Profile Identifiers in the *BluetoothProfileDescriptorList* attribute.

Attribute Identifier codes Numeric IDs

Mnemonic	Attribute ID	Reference
ServiceRecordHandle	0x0000	See <i>Bluetooth Service Discovery Protocol (SDP)</i> , Bluetooth SIG
ServiceClassIDList	0x0001	[SDP]
ServiceRecordState	0x0002	[SDP]
ServiceID	0x0003	[SDP]
ProtocolDescriptorList	0x0004	[SDP]
BrowseGroupList	0x0005	[SDP]
LanguageBaseAttributeIDList	0x0006	[SDP]
ServiceInfoTimeToLive	0x0007	[SDP]
ServiceAvailability	0x0008	[SDP]
<i>Bluetooth</i> ProfileDescriptorList	0x0009	[SDP]
DocumentationURL	0x000A	[SDP]
ClientExecutableURL	0x000B	[SDP]
IconURL	0x000C	[SDP]
AdditionalProtocolDescriptorLists	0x000D	[SDP]
GroupID	0x0200	[SDP]
IpSubnet	0x0200	See Personal Area Networking profile for <i>Bluetooth</i> , Bluetooth SIG
SupportFeaturesList	0x0200	See Health Device Profile (HDP), Bluetooth SIG
VersionNumberList	0x0200	[SDP]
ServiceDatabaseState	0x0201	[SDP]
Service Version	0x0300	
DataExchangeSpecification	0x0301	See Health Device Profile (HDP), Bluetooth SIG
External network	0x0301	See Cordless Telephony Profile, Bluetooth SIG
Network	0x0301	See the Handsfree Profile (HFP)
Supported Data Stores List	0x0301	See Synchronization Profile, Bluetooth SIG
Fax Class 1 Support	0x0302	See Fax Profile, Bluetooth SIG
Remote audio volume control	0x0302	See Generic Access Profile, Bluetooth SIG
MCAP Supported Procedures	0x0302	See Health Device Profile (HDP), Bluetooth SIG
Fax Class 2.0 Support	0x0303	
Supported Formats List	0x0303	See Object Push Profile, Bluetooth SIG.
Fax Class 2 Support	0x0304	
Audio Feedback Support	0x0305	

NetworkAddress	0x0306	See Interoperability Requirements for <i>Bluetooth</i> as a WAP, Bluetooth SIG
WAPGateway	0x0307	See Interoperability Requirements for <i>Bluetooth</i> as a WAP, Bluetooth SIG
HomePageURL	0x0308	See Interoperability Requirements for <i>Bluetooth</i> as a WAP, Bluetooth SIG
WAPStackType	0x0309	See Interoperability Requirements for <i>Bluetooth</i> as a WAP, Bluetooth SIG
SecurityDescription	0x030A	See Personal Area Networking profile for <i>Bluetooth</i> , Bluetooth SIG
NetAccessType	0x030B	See Personal Area Networking profile for <i>Bluetooth</i> , Bluetooth SIG
MaxNetAccessrate	0x030C	See Personal Area Networking profile for <i>Bluetooth</i> , Bluetooth SIG
IPv4Subnet	0x030D	See Personal Area Networking profile for <i>Bluetooth</i> , Bluetooth SIG
IPv6Subnet	0x030E	See Personal Area Networking profile for <i>Bluetooth</i> , Bluetooth SIG
SupportedCapabilities	0x0310	See [IMAGING], Bluetooth SIG
SupportedFeatures	0x0311	See [IMAGING] and [HFP] (the Handsfree Profile), Bluetooth SIG
SupportedFunctions	0x0312	See [IMAGING], Bluetooth SIG
TotalImagingDataCapacity	0x0313	See [IMAGING], Bluetooth SIG
SupportedRepositories	0x0314	See Phone Book Access Profile, Bluetooth SIG
MASInstanceID	0x0315	<i>Bluetooth</i> Message Access Profile, Bluetooth SIG
SupportedMessageTypes	0x0316	<i>Bluetooth</i> Message Access Profile, Bluetooth SIG
	(Max value 0xFFFF)	

Table 3: Attribute Identifiers

Attribute Identifier codes String IDs

Mnemonic	Attribute ID [Ref #6]	Reference
ServiceName	0x0000	[SDP]
ServiceDescription	0x0001	[SDP]
ProviderName	0x0002	[SDP]
	(Max value 0xFFFF)	

Table 4: Attribute Identifiers

[Ref #6: To each ID value in this table must be added a base offset as given by the LanguageBaseAttributeIDList attribute. For the primary language, this must be equal to 0x0100 as described in the SDP specification.]

Protocol Parameters

Protocol	Parameter mnemonic	Index
L2CAP	PSM	1
RFCOMM	Channel	1
TCP	Port	1
UDP	Port	1
BNEP	Version	1
BNEP	Supported Network Packet Type List	2

Table 5: *Protocol Parameters*

Document Tools

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