

SDC update

Joint meeting of IEEE EMBS 11073 & HL7 Health Care Devices (DEV) WG,
2016/05/10, Stefan Schlichting, David Gregorczyk

SDC Update

Agenda

1. **PARs**
2. Draft Documents
3. OR.NET
4. Reference Implementation Update
5. Roadmap

PARs

Overview

P11073-10702	P11073-20701	P11073-10702
Submitter Email: stefan.schlichting@draeger.com Type of Project: New IEEE Standard PAR Request Date: 19-Oct-2014 PAR Approval Date: 10-Dec-2014 PAR Expiration Date: 31-Dec-2018 Status: PAR for a New IEEE Standard	Submitter Email: stefan.schlichting@draeger.com Type of Project: New IEEE Standard PAR Request Date: 19-Oct-2014 PAR Approval Date: 10-Dec-2014 PAR Expiration Date: 31-Dec-2018 Status: PAR for a New IEEE Standard	Submitter Email: stefan.schlichting@draeger.com Type of Project: New IEEE Standard PAR Request Date: 19-Oct-2014 PAR Approval Date: 10-Dec-2014 PAR Expiration Date: 31-Dec-2018 Status: PAR for a New IEEE Standard
1.1 Project Number: P11073-10702 1.2 Type of Document: Standard 1.3 Life Cycle: Full Use	1.1 Project Number: P11073-20701 1.2 Type of Document: Standard 1.3 Life Cycle: Full Use	1.1 Project Number: P11073-10702 1.2 Type of Document: Standard 1.3 Life Cycle: Full Use
2.1 Title: Standard for Domain Information & Service	2.1 Title: Standard for Service-Oriented Medical Device	2.1 Title: Standard for Domain Information & Service Mod
3.1 Working Group: Upper_Layer (EMB/11073/UI) Contact Information for Working Group Chair Name: Jan Wittenber Email Address: jan.wittenber@gmail.com Phone: 978-494-2439 Contact Information for Working Group Vice-Ch None	3.1 Working Group: Upper_Layer (EMB/11073/UL) Contact Information for Working Group Chair Name: Jan Wittenber Email Address: jan.wittenber@gmail.com Phone: 978-494-2439 Contact Information for Working Group Vice-Chair None	3.1 Working Group: Upper_Layer (EMB/11073/UL) Contact Information for Working Group Chair Name: Jan Wittenber Email Address: jan.wittenber@gmail.com Phone: 978-494-2439 Contact Information for Working Group Vice-Chair None
3.2 Sponsoring Society and Committee: IEEE Engi (EMB/11073)	3.2 Sponsoring Society and Committee: IEEE Engine (EMB/11073)	3.2 Sponsoring Society and Committee: IEEE Engineerin (EMB/11073)

PARs

SDC DKE Workgroup

- Development of content in DKE WG STD 1000.8.03 WG
 - approx. every 6 Weeks as F2F or Telco
 - Next Meeting 2016-06-17 in Frankfurt
- Discussion of latest draft of the standards
 - IEEE SA Central Desktop
 - Telcos on request

If you want to participate

Contact Stefan Schlichting or Jan Wittenber

SDC Update

Agenda

-
1. PARs
 - 2. Draft Documents**
 3. OR.NET
 4. Reference Implementation Update
 5. Roadmap
-
-

Draft Documents

20702 - MDPWS



**Ballot
invitation
complete**

Stability

- Closed all tickets before ballot invitation
- Hold 4 Educational Webinars
- Balanced ballot group with 33 participants
- Conditional approval to start the IEEE Standard Sponsor ballot
- Waiting for MEC confirmation

Draft Documents

20702 - MDPWS

Examples

2 **4.1 SOAP-over-UDP**

3 R0001: A SERVICE MAY send a SOAP ENVELOPE that has more octets than the MTU over

4 R0002: A SERVICE MAY reject a SOAP ENVELOPE received over UDP that has more than
5 MAX_LARGE_UDP_ENVELOPE_SIZE octets if it is received via the discovery port. Otherwise, it
6 SHOULD NOT be rejected.

7 R0003: A CLIENT MAY reject a SOAP ENVELOPE received over UDP that has more than
8 MAX_LARGE_UDP_ENVELOPE_SIZE octets if it is received via the discovery port. Otherwise, it
9 SHOULD NOT be rejected.

10 NOTE— dpws:R0029 defines a limit for SOAP ENVELOPES send over UDP. In order to allow larger
11 SOAP-over-UDP Streaming messages, this specification relaxes the utilization of
12 MAX_UDP_ENVELOPE_SIZE. The same is true for dpws:R5018 and dpws:R5019.

13 **4.2 SOAP-over-HTTP**

14 R0004: A SERVICE SHALL at least implement the Responding SOAP Node of an HTTP one-way
15 Message Exchange Pattern where the SOAP ENVELOPE is carried in the HTTP Request and the
16 HTTP Response has a Status Code of 202 Accepted.

17 R0005: A SERVICE MAY send a TEXT SOAP ENVELOPE with more than
18 MAX_ENVELOPE_SIZE octets

19 R0006: A SERVICE SHOULD NOT send a TEXT SOAP ENVELOPE with more than
20 MAX_LARGE_ENVELOPE_SIZE octets.

21 NOTE—dpws:R0030 requires an empty Entity Body (no SOAP ENVELOPE) in the response while
22 bn20-R2714 allows a SOAP ENVELOPE for infrastructure-related faults and protocol extensions, thus

Draft Documents

20702 - MDPWS

Milestone 201602 - MDPWS

Maximize

Bulk Move

Status: Open

Due Date: 02/29/2016

Progress: 0 / 0

Milestone for 20702 MDPWS spec for ballott readiness

Showing 5 results of 5

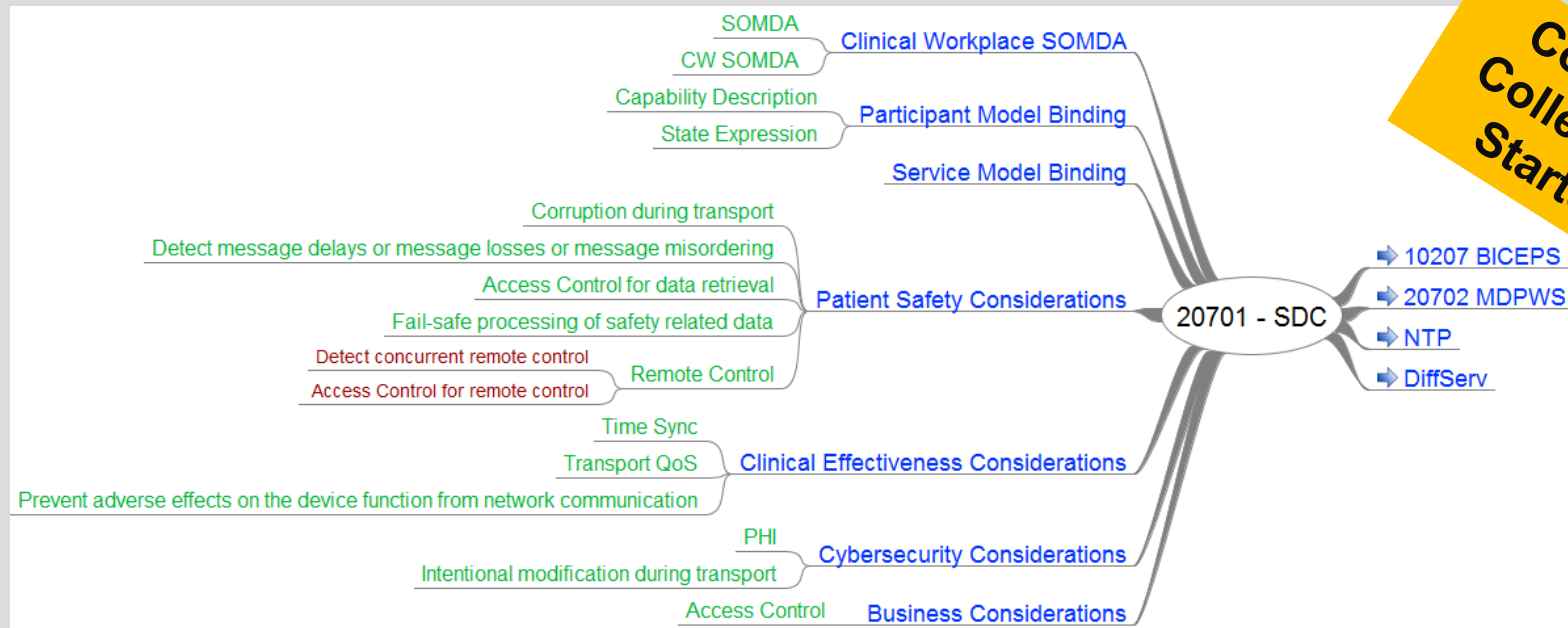
#	Summary ▾	Milestone ▾	Status	Owner ▾	Created	Updated ▾	
317	Wrong datatypes in code outline	201602 - MDPWS	unread	David	2016-04-18	2016-04-18	
315	xsd:duration should be xsd:dayTime	201602 - MDPWS	unread	David	2016-04-01	2016-04-01	
309	Add reference to XML schema	201602 - MDPWS	closed	Stefan Schlichting	2016-02-04	less than 1 minute ago	
308	Add DPWS activity diagrams to informative annex	201602 - MDPWS	closed	Stefan Schlichting	2016-02-04	less than 1 minute ago	
305	Change R0035 and R0036 such that it fits hex-encoding	201602 - MDPWS	closed	David	2016-01-18	less than 1 minute ago	

<https://goo.gl/09KFh0>

Draft Documents

20701 - SDC

Content
Collection
Started



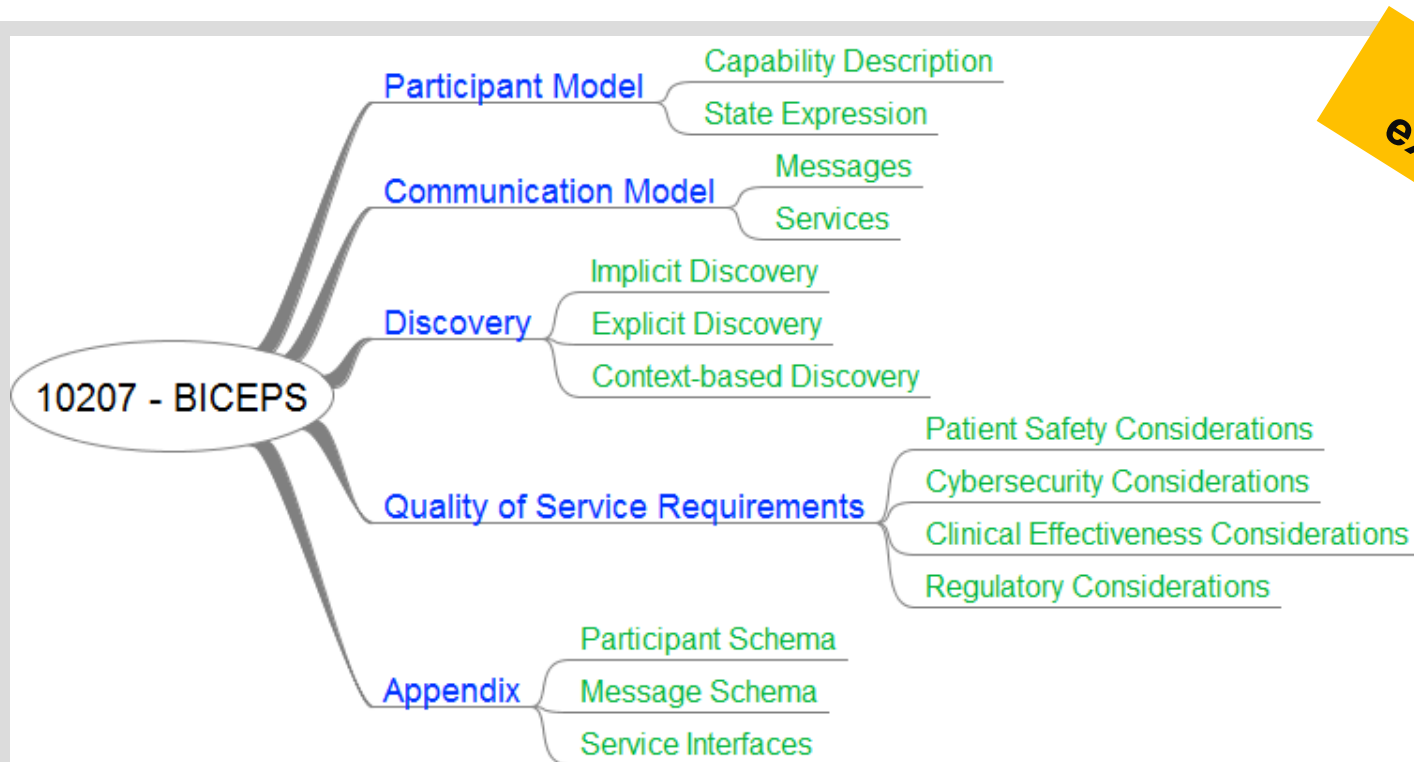
Stability

- No significant changes since January WG meeting
- Started to prepare the first draft

<https://goo.gl/rD33rd>

Draft Documents

10207 - BICEPS



Updates
expected

Stability

- Minor changes to model to ease implementation
- 45 minor change requests open

Draft Documents

10207 - BICEPS

Milestone 201608 - BICEPSMaximizeBulk Move

Status: Open **Due Date:** 08/05/2016 **Progress:** 0 / 0

Milestone for 10207 BICEPS spec for the ballott readiness

Showing results of 45

#	Summary ▾	Milestone ▾	Status ▾	Owner ▾	Created	Updated
318	Remove ContextAssociation enum "NoAssociation"	201608 - BICEPS	accepted	David	2016-05-02	5 minutes ago
316	BICEPS R0013 may be too strict or may need rephrasing	201608 - BICEPS	open		2016-04-06	5 minutes ago
314	Is there any requirement that BICEPS depends on XML technology?	201608 - BICEPS	unread	Stefan Schlichting	2016-02-12	5 minutes ago
312	Why are ObservedValues optional?	201608 - BICEPS	unread	Stefan Schlichting	2016-02-12	5 minutes ago
307	Change number of second requirement with number R0086	201608 - BICEPS	accepted	Stefan Schlichting	2016-02-03	5 minutes ago
304	Indicate Relationship between AlertCondition and other parts	201608 - BICEPS	unread	Stefan Schlichting	2015-12-21	5 minutes ago
303	Simplification of EnumNomenRef	201608 - BICEPS	review	Stefan Schlichting	2015-12-16	5 minutes ago

<https://goo.gl/ITCOrw>

January Version has showed its feasibility in OR.NET demonstrators!

SDC Update

Agenda

1. PARs
2. Draft Documents
- 3. OR.NET**
4. Reference Implementation Update
5. Roadmap

OR.NET

conHIT demonstrators



OR.NET

conHIT demonstrators



OR.NET

Status

The OR.NET project – funded by BMBF – ended end of April 2016.

The OR.NET Non-Profit Association

What's next?

The dynamic interconnection of medical devices in the OR-network as well as the interaction of these devices with medically approved software is a particular challenge to information- and communication technologies in the medical field. The aim of the OR.NET non-profit association is to **continue the work** which has been done during the OR.NET project in 2012 - 2016.

Fundamental concepts for the secure and dynamic networking of components in operating room and hospital shall be further developed, evaluated and brought into standardization processes. For these concepts appropriate offers for training and further education and for services related to testing and approval have to be developed in order to ensure sustainability.



The OR.NET Association consists of several working groups, which build the operational base for cooperation and teamwork within the association:

- Industry
- Clinical users and operators
- Standardisation and Internationalisation
- Human-machine-interaction and Risk Management
- Regulatory affairs
- Software Stacks (Library)
- Test labs, simulators and data security
- Education and training
- Approval strategies
- Coordination of OR.NET test labs and demonstrator sites

Members of the executive board are:

Chairman: Dr. Frank Portheine, SurgiTAIX AG, Aachen, Vice chairman: Prof. Thomas Neumuth, ICCAS, University Leipzig, Treasurer: Prof. Martin Leucker, ISP, University Lübeck, Board member for industrial affairs: Marc Stanesby, steute Schaltgeräte GmbH & Co. KG, Löhne, Board member for medical affairs: PD Dr. Michael Czaplik, Clinic for Anesthesiology, University Hospital Aachen, Board member for international standardisation: Dr. Stefan Schlichting, Drägerwerk AG & Co. KG, Lübeck, Board member for risk management and regulatory affairs: Dr. Armin Janß, CeMPEG e.V., Aachen

You would like to know more about activities, benefits, and membership options?

➔ Please visit www.ornet.org

Find the latest OR.NET flyer with information about the OR.NET non-profit association under <http://goo.gl/cAHV8s>

OR.NET

AAMI/UL JC 2800 Alignment

Weekly telco to inform JC2800 members about the

- OR.NET non-profit association
- SDC and its relationship to ICE
- Risk Management approach

SDC Update

Agenda

1. PARs
2. Draft Documents
3. OR.NET
- 4. Reference Implementation Update**
5. Roadmap

Reference Implementation Update

What is OSCLib?



The screenshot shows the SurgiTAIX AG website. The header includes the company logo (a blue circle with a white 'S' shape) and the text 'SurgiTAIX AG Surgical Technologies' next to a photo of a modern blue building. A dark navigation bar contains links: Home, News, company, Products, R & D, services, consultation, contact, and imprint. The main content area is titled 'Open Surgical Communication Library'. The text describes OSCLib as a lightweight C++ web library for medical devices implementing the OR.NET specified Open Surgical Communication Protocol (OSCP) based on DPWS 1.1. It mentions support for SOAP 1.2 and WSDL 1.1 standards and that it is an open source C++ library. A 'contact' link is provided. A section titled 'License model' states that all developed in the project OR.NET specifications implemented by the OSCLib apply as an open standard with no license fees. The text is partially cut off at the bottom.

SurgiTAIX AG
Surgical Technologies

Home News company Products R & D services consultation contact imprint

Open Surgical Communication Library

The Open Surgical Communication Library (OSCLib) is a lightweight C ++ web library for medical devices. It implements the project [OR.NET](#) specified Open Surgical Communication Protocol (OSCP), based on [DPWS](#) 1.1.

The OSCLib supports SOAP 1.2 and WSDL 1.1 standards.

The OSCLib is as open source C ++ - be available library.

[contact](#)

License model

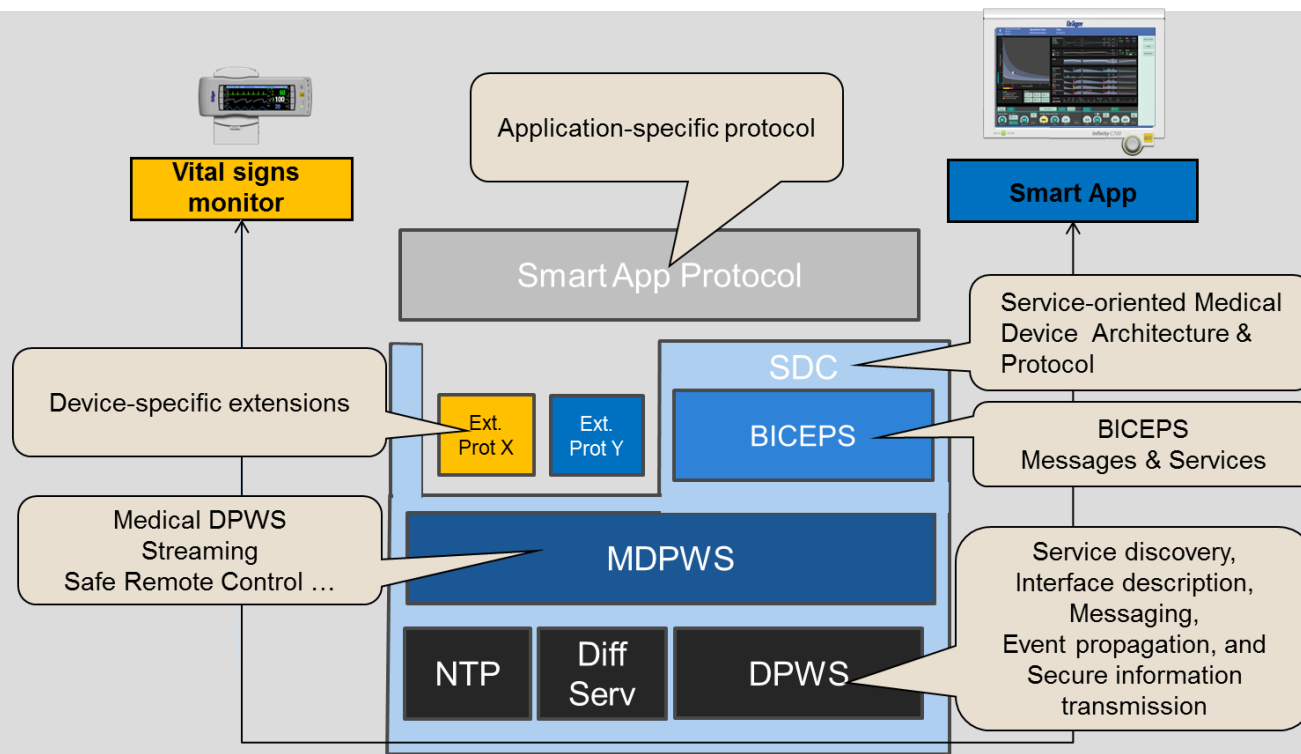
All developed in the project OR.NET specifications that are implemented by the OSCLib, apply as an open standard. Basically, therefore, be no license fees for the use of this standard applicable.

The proprietary use of the sample implementations (such as the OSCLib) after completion of the project requires

<http://goo.gl/23HPI7>

Reference Implementation Update

What is openSDC?

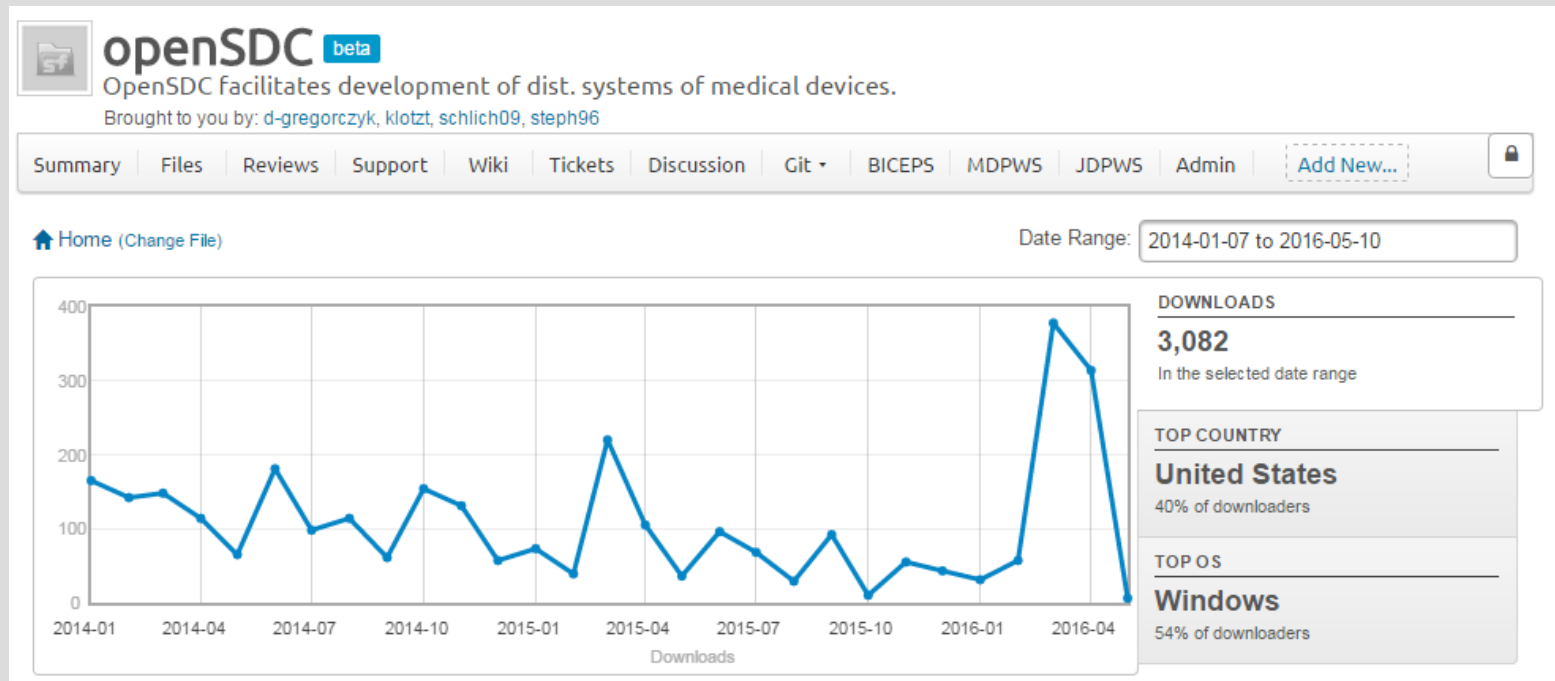


openSDC is a reference implementation of the extensible SDC protocol stack for clinical workplace service-oriented medical device architectures

- BICEPS (Message & Service Model)
- MDPWS & DPWS (Transport)

Reference Implementation Update

openSDC



openSDC downloads since January 2014 WG Meeting

- Version beta06 only available through develop branch in git
- Currently working on incorporating latest JMedS version in branch of beta06

See <http://sourceforge.net/projects/opensdc/>

SDC Update

Agenda

1. PARs
2. Draft Documents
3. OR.NET
4. Reference Implementation Update
- 5. Roadmap**

Roadmap

Proposed Actions

20702 – MDPWS

Start Balloting

10207 – BICEPS

Decide on ballot readiness in Q3/2016 in a series of telcos

Educational Webinars in August

Prepare to form ballot group

20701 – SDC

Prepare requirements with references to 10207 & 20702

Content-ready in Q3/2016

**Thank you for your
attention.**

Contact

Stefan Schlichting, David Gregorczyk

stefan.schlichting@draeger.com

david.gregorczyk@draeger.com