WSON Summary

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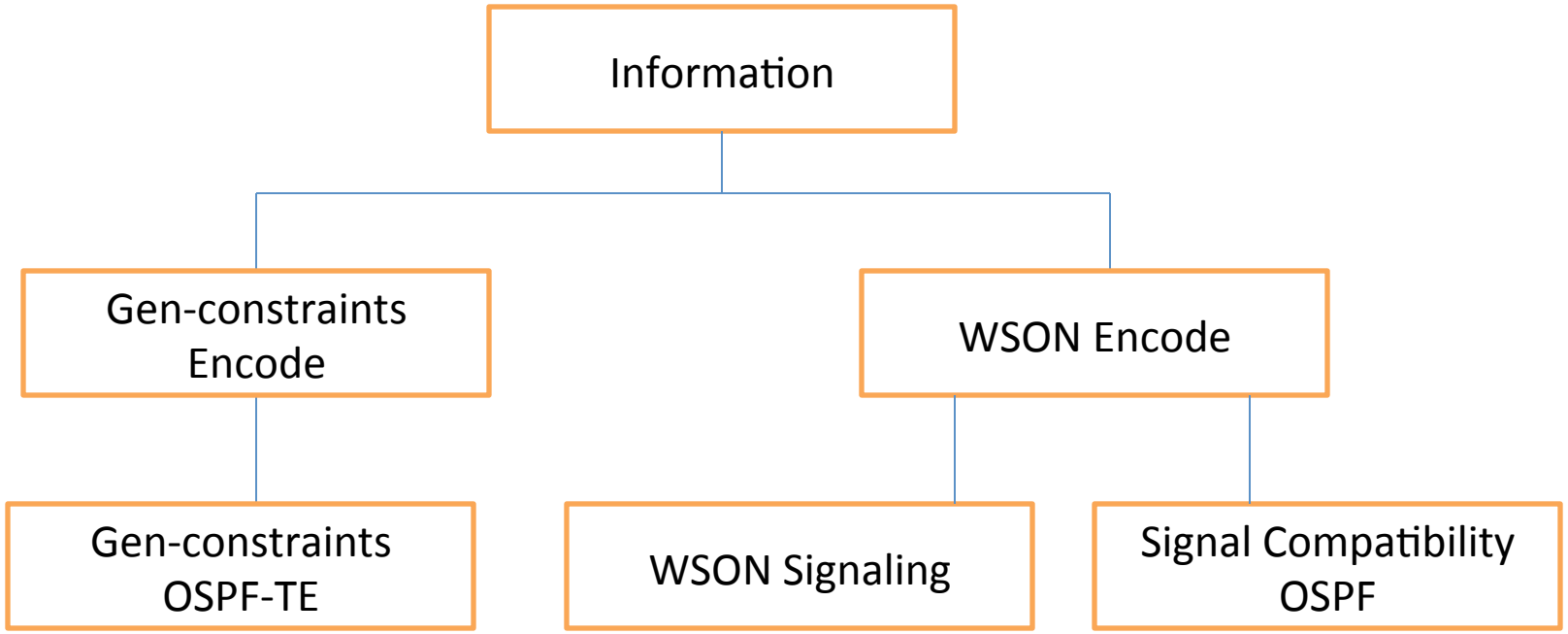
Document Relationships



WG LC/ Shepherd Review

- Six WSON related drafts have been updated as part of WG LC and Document shepherd review and are now waiting for WG chair go-ahead:
  - https://datatracker.ietf.org/doc/draft-ietf-ccamp-rwa-info/
  - https://datatracker.ietf.org/doc/draft-ietf-ccamp-general-constraint-encode/
  - https://datatracker.ietf.org/doc/draft-ietf-ccamp-rwa-wson-encode/
  - https://datatracker.ietf.org/doc/draft-ietf-ccamp-gmpls-general-constraints-ospf-te/
  - https://datatracker.ietf.org/doc/draft-ietf-ccamp-wson-signal-compatibility-ospf/
  - http://datatracker.ietf.org/doc/draft-ietf-ccamp-wson-signaling/
- Made global consistency for terms and general editorial updates (e.g., abbreviation spelled out at the first usage, etc.) and readability improvement, mostly in non-technical nature

https://datatracker.ietf.org/doc/draft-ietf-ccamp-rwa-info/

- Global terminology alignment across [Gen-code] and [WSON-encode]
- SRNG removed
- Introduced <RBSharedAccessWaveAvailability> ::= [<InAvailableWavelengths>] [<OutAvailableWavelengths>] to match with wson-encode draft.
- OLD: <RBPoolState> ::=(<ResourceBlockID><NumResourcesInUse><InAvailable Wavelengths> <OutAvailableWavelengths>)...

  NEW: <RBPoolState> ::=<ResourceBlockID> <NumResourcesInUse> [<RBSharedAccessWaveAvailability>] [<RBPoolState>]
- OLD: <ResourceBlockInfo> ::=

  ([<ResourceSet>] <InputConstraints> [<ProcessingCapabilities>] <OutputConstraints>)*

  NEW: <ResourceBlockInfo> ::= <ResourceBlockSet> [<InputConstraints>] [<ProcessingCapabilities>] [<OutputConstraints>]

https://datatracker.ietf.org/doc/draft-ietf-ccamp-rwa-info/ (cont.)

- OLD: <LinkInfo> ::= <LinkID> [<AdministrativeGroup>] [<InterfaceCapDesc>] [<Protection>][<SRLG>]... [<TrafficEngineeringMetric>] [<PortLabelRestriction>]

  NEW: <LinkInfo> ::= <LinkID> [<AdministrativeGroup>] [<InterfaceCapDesc>] [<Protection>] [<SRLG>...] [<TrafficEngineeringMetric>] [<PortLabelRestriction>…]
- <PortLabelRestriction> cleaned up to match with Encoding in Section 6.6.

https://datatracker.ietf.org/doc/draft-ietf-ccamp-general-constraint-encode/

- The order of content changed to align with the info document.
- ingress/egress to input/output
- Change log deleted
- In Section 2, added texts concerning the relationship with the info draft and protocol enhancements being pursued in other documents.
- In Section 5, security reference added, [RFC5920].
- Other references clean-ups

https://datatracker.ietf.org/doc/draft-ietf-ccamp-gmpls-general-constraints-ospf-te/

- Adding a paragraph that clarifies the relationship between this draft and GEN-Encode (in the introduction)
- Dropped the use of a new top-level TLV (Generic Node Attribute TLV). Instead the **Node Attribute TLV** (existing, per RFC 5786) was used to describe the connectivity matrix.
- In Section 5.2, added a text that deals with malformed TLV's:
  - "In case where the new sub-TLVs or their attendant encodings are malformed, the proper action would be to log the problem and ignore just the sub-TLVs in GMPLS path computations rather than ignoring the entire LSA."
- Security Section added: "For general security aspects relevant to Generalized Multiprotocol Label Switching (GMPLS)-controlled networks, please refer to [RFC5920]."
- IANA Consideration Section, suggested type-values were specified for the new TLV's introduced.

https://datatracker.ietf.org/doc/draft-ietf-ccamp-rwa-wson-encode/

- Section 4: Resource Block Information field and its encoding has moved from the OSPF document (draft-ietf-ccamp-wson-signal-compatibility-ospf-13.txt) to this section.
  - This decision was made due to the fact that the Resource Block Information sub-fields are "not" protocol dependent encodings and cannot be addressed in the corresponding OSPF enhancement document.
- Section 4.1: A formal definition of TLV is introduced for Optional subfields:
- Section 6, the IANA Section introduces a new registry for GMPLS routing parameters for WSON encoding: "**Types for subfields of WSON Resource Block Information**"

Value	Length	Sub-TLV Type
0	Reserved	
1	variable	Optical Interface Class List
2	variable	Acceptable Client Signal List
3	variable	Input Bit Rate List
4	variable	Processing Capability List
5-65535	Unassigned	

https://datatracker.ietf.org/doc/draft-ietf-ccamp-wson-signal-compatibility-ospf

- Section 2.1, Resource Block Information subfields (sub-TLVs) description has moved to Section 4/4.1 in WSON-Encode (draft-ietf-ccamp-rwa-wson-encode-24.txt).
  - This decision was made due to the fact that Resource Block Information sub-fields are not routing protocol dependent parameters
- In Section 4, added a text that deals with malformed TLV's:
  - "In case where the new sub-TLVs or their attendant encodings are malformed, the proper action would be to log the problem and ignore just the sub-TLVs in GMPLS path computations rather than ignoring the entire LSA."
- Section 6.1.1 The IANA recommendation for WDM Resource Block Information nested sub-TLVs has moved to Section 6.1 in WSON-Encode (draft-ietf-ccamp-rwa-wson-encode-24.txt).
- General Editorial improvements
  - Terminology consistency across Info and WSON-Encode drafts - Revision History Removed
  - Added a new text in Section 3.1: "The label format defined in [RFC6205] MUST be used when advertising interfaces with a WSON-LSC type Switching Capability."
  - Added in Security Section a reference for general security - RFC 5920.
  - Updated IANA Consideration Sections
  - References Updates/Clean-ups.

http://datatracker.ietf.org/doc/draft-ietf-ccamp-wson-signaling/

- Added in abstract: This draft updates [RFC 6205] as it makes it applicable to WSON-LSC capable equipment.
- Added in Section 4 : the LSPs signaled per the document must use:
  - Switching Type = WSON-LSC [WSON-OSPF]
  - Encoding Type = Lambda [RFC3471]
  - Label format = per [RFC6205]
- In Section 4.2, WSON Processing Object -> WSON Processing HOP Attribute TLV as defined in [RSVP-RO] ;
- <Wavelength Assignment Method Selection> deleted from WavelengthProcessing and moved as sub-TLV of the LSP Attribute Object as defined in [RFC5420].
- IANA Updated to reflect the above changes.
- Section 5 deleted and one paragraph, moved to Section 4.3: "The usage of WSON Processing object for the bidirectional case is the same as per unidirectional. When an intermediate node uses information from this object to instruct a node about wavelength regeneration, the same information applies to both downstream and upstream directions."
- Path Err generation removed in dealing with <RB Info> handling (Section 4.3)