

| | |
|-------------------------|---|
| 1. Record Nr. | UNINA9910143700003321 |
| Autore | Helvoort Huub van |
| Titolo | SDH/SONET explained in functional models [[electronic resource]] : modeling the optical transport network / / Huub van Helvoort |
| Pubbl/distr/stampa | Chichester, : Wiley, c2005 |
| ISBN | 1-280-24280-9 9786610242801 0-470-09125-8 0-470-09124-X |
| Descrizione fisica | 1 online resource (302 p.) |
| Disciplina | 621.38216 |
| Soggetti | Synchronous digital hierarchy (Data transmission) SONET (Data transmission) Electronic books. |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Description based upon print version of record. |
| Nota di bibliografia | Includes bibliographical references and index. |
| Nota di contenuto | SDH/SONET Explained in Functional Models; Contents; Preface; Acknowledgements; Abbreviations; 1 Introduction; 1.1 History; 1.2 Justification; 1.3 Remarks on the concept; 1.4 Standards structure; 2 Functional modeling; 2.1 Functional architecture of transport networks; 2.2 Functional model requirements; 2.3 Functional model basic structure; 2.3.1 Architectural components; 2.3.2 Topological components; 2.4 Functional model detailed structure; 2.4.1 Transport entities; 2.4.2 Transport processing functions; 2.4.3 Reference points; 2.4.4 Components comparison; 2.5 Client/server relationship 2.5.1 Multiplexing2.5.2 Inverse multiplexing; 2.6 Layer network interworking; 2.7 Linking the functional model and the information model; 2.8 Application of concepts to network topologies and structures; 2.8.1 PDH supported on SDH layer networks; 2.8.2 Inverse multiplexing transport; 3 Partitioning and layering; 3.1 Layering concept; 3.2 Partitioning concept; 3.2.1 Sub-network partitioning; 3.2.2 Flow domain partitioning; 3.2.3 Link partitioning; 3.2.4 Access group partitioning; 3.3 Concept applications; 3.3.1 Application of the layering concept; 3.3.2 Application of the partitioning concept |

4 Expansion and reduction4.1 Expansion of layer networks; 4.1.1 Expansion of the path layer network; 4.1.2 Expansion of the transmission media layer; 4.1.3 Expansion of specific layer networks into sublayers; 4.2 General principles of expansion of layers; 4.2.1 Adaptation expansion; 4.2.2 Trail termination expansion; 4.2.3 Connection point expansion; 4.3 Reduction of detail; 5 Adaptation functions; 5.1 Generic adaptation function; 5.2 Adaptation function examples; 5.2.1 The Sn/Sm_A function; 5.2.2 The OCh/Rsn_A function; 5.2.3 The LCAS capable Sn-X-L/ETH_A function 5.2.4 GFP mapping in the Sn-X/_A function6 Trail termination functions; 6.1 Generic trail termination function; 6.2 Trail termination function examples; 6.2.1 The Sn_TT function; 6.2.2 The OCh_TT function; 6.2.3 The ETH_FT function; 7 Connection functions; 7.1 Generic connection function; 7.2 Connection function example; 7.2.1 VC-n layer connection function Sn_C; 7.2.2 ETH flow domain; 7.3 Connection matrix examples; 7.3.1 Connection matrix example for full connectivity; 7.3.2 Connection matrix example for two groups; 7.3.3 Connection matrix example for three groups 8 Connection supervision8.1 Quality of Service; 8.2 Connection monitoring methods; 8.2.1 Inherent monitoring; 8.2.2 Non-intrusive monitoring; 8.2.3 Intrusive monitoring; 8.2.4 Sublayer monitoring; 8.3 Connection monitoring applications; 8.3.1 Monitoring of unused connections; 8.3.2 Tandem connection monitoring; 9 Protection models; 9.1 Introduction; 9.2 Protection; 9.2.1 Trail protection; 9.2.2 Sub-network connection protection; 10 Compound functional models and their decomposition; 10.1 LCAS disabled VCAT functions; 10.1.1 Sn-Xv trail termination function 10.1.2 Sn-Xv/Sn-X adaptation function

Sommario/riassunto

H/SONET Explained in Functional Models represents a fresh approach to the modeling of transport network technologies. This practical guide and reference text uncovers the description of SDH (Synchronous Digital Hierarchy), SONET (Synchronous Optical Network) and OTN (Optical Transport Network) transport networks and equipment using functional/atomic modeling techniques. It clearly explains the use of models in the ITU-T and ETSI standards, the transport networks and the transport equipment in the definition, implementation and deployment phase. Pays particular atte
