

# WIP: Documentation structure

## Benchmark

1. <https://docs.readthedocs.io/en/stable/index.html>
2. <https://pip.pypa.io/en/stable/>
3. <https://docs.reneng.linuxfoundation.org/en/latest/index.html>
4. <https://docs.opendaylight.org/en/stable-magnesium/>
5. <https://fd.io/docs/vpp/latest/troubleshooting/index.html>
6. <https://docs.onap.org/en/latest/guides/onap-user/design/index.html>
7. <http://pnda.io/guide>
8. <https://github.com/open-switch/opx-docs/wiki>
9. <http://www.contribution-guide.org>
10. <https://www.postgresql.org/docs/>
11. <https://docs.zephyrproject.org/latest/>
12. <http://www.openmama.org/documentation>
13. <https://docs.openvswitch.org/en/latest/>
14. [https://helm.sh/docs/intro/using\\_helm/](https://helm.sh/docs/intro/using_helm/)
15. <https://www.envoyproxy.io/docs/envoy/v1.15.0/intro/deprecated>
16. <https://www.snas.io/docs/>

## Constraints

1. Tungsten Fabric is an open source project. Everyone can contribute while following rules. Those rules need to be described.
2. TF is a project under Linux Foundation. There needs to be a section describing what LF-networking is and what is the governance of the project.
3. TF consists of modules. Modules might have their own documentation for installing, debugging, and development.
4. TF has a GUI. There is a need for a user manual on how to use it.
5. TF has dependencies on other software (for example orchestrators like Openstack or operating systems like Ubuntu). Those changes might have an impact on installation and deployment procedures. This means TF docs need versioning.
6. TF has dependencies on other software (for example orchestrators like Openstack or operating systems like Ubuntu). Each release is compatible with different versions. Compatibility and supported platforms should be documented.
7. Much of the project governance is done using wiki.tungsten.io. There should be clear guidance on what should go to docs and what should go to the wiki. Otherwise, it'll end with parallel maintenance (or worse — lack of maintenance).

## New documentation tree

Legend:

Color	Status
Quickstart	Not yet analyzed
Quickstart	Waiting to be written/re-written
Quickstart	Done

- About the documentation
- Quickstart / Getting started (alt names: Introduction) (Q: should we split it into two sections like Introduction that will explain TF and Getting started that will guide you through first installation steps?)
  - What is Tungsten Fabric?
  - What problems does it solve?
  - New and Changed Features in this release
    - <Feature name>
  - Resolved issues in this release
    - <JIRA TICKET ID> - <JIRA TICKET SUMMARY>
  - Supported Platforms
  - Known Behavior
    - <JIRA TICKET ID> - <JIRA TICKET SUMMARY>
  - Roadmap
  - Architectural Overview (Q: should the *Architectural Overview* be a section under *Getting started* or should it be a section under *Deep dive*?)
  - Use cases
  - Blueprints (supersedes Roadmap?)
- Installation (Q: should the installation be a separate section or does it fall under *Getting started*?)
  - Hardware requirements
  - Download?
  - Building from source?
  - Installation options:
    - tf-devstack
    - Ubuntu
    - Centos

- other?
  - Docker Env file parameters (based on [https://www.juniper.net/documentation/en\\_US/release-independent/contrail/topics/reference/contrail-docker-env-parameters.pdf](https://www.juniper.net/documentation/en_US/release-independent/contrail/topics/reference/contrail-docker-env-parameters.pdf))
  - Upgrade
- Deployment (Q: should the deployment be a separate section or should it fall under *Deep dive*?)
- Deep Dive / Development (should describe in detail how the things work, how to debug TF and how to develop it)
- User guides
  - Configuring Virtual Networks
  - Example of Deploying a Multi-Tier Web Application
  - Configuring Services
  - Configuring Service Chaining
  - Adding Physical Network Functions in Service Chains
  - Configuring High Availability
  - Configuring Multitenancy Support
  - Load Balancers
- API & CLI
- About Tungsten Fabric (alt names: Tungsten Fabric open source project, Community)
  - Contributing to Tungsten Fabric
  - Get in touch
    - Contact channels
    - Registration and user creation
    - Contributing to the development
    - Contributing to the documentation
    - Submitting bugs
    - Submitting blueprints
    - Triaging tickets (how to work with JIRA)
  - Developer documentation (These are guides and helpful documentation to running your own local version of TF for development)
    - Gerrit Guide
    - Infrastructure Guide
    - Integration Testing Guide
    - Integration Distribution Guide
    - Integration Packaging Guide
    - Release Process Guide
    - Documentation guide
      - Where you should put your documentation
      - Installing software ([sphinx](#) and [tox](#))
      - Getting the code (Full example of GitHub workflow.)
        - Signed off
        - easyCLA
        - More reading: [here](#)
      - Running linter
      - Building
      - Updating the [docs.tungsten.io](#)
      - Principles of documentation
      - The Brand
      - Rst basics (based on [this](#))
        - Sections
        - Text Formatting
        - Inline markup and special characters (e.g., bold, italic, verbatim)
        - Headings
        - Internal and External Links
        - List and bullets
        - Images
      - Documentation versioning
        - Updating current version
        - Writing for an unreleased version
        - Releasing new version
        - More reading: [here](#) and [here](#)
      - Building documentation
      - Writing documentation
- Glossary

## Existing documentation

(YMNW - Yes, Maybe, No, Write/Re-write)

### 1. [tungstenfabric/docs](#)

- [User Documentation](#)
  - [Getting Started with Tungsten Fabric](#)    **Y** (move under *Quickstart / Getting started*)
  - [Getting Started with \*tf-devstack\*](#)    **Y** (move under *Quickstart / Getting started*)
  - [Tungsten Fabric 5.1 Release](#)    **N** (empty page)
    - [Release Notes: Tungsten Fabric 5.1](#)    **Y** (move under *Release Notes* for the correct documentation branch/version)
      - [Table of Contents](#)    **N** (empty page)
      - [Introduction](#)    **N** (empty page)

- [New and Changed Features](#) Y
- [Supported Platforms Tungsten Fabric 5.0](#) Y
- [Known Behavior](#) Y
- [Resolved Issues](#) Y
- [Deprecated Items](#) Y
- [Requesting Technical Support](#) N (contact will be covered by *Get in touch*)
- [Tungsten Fabric 5.0.1 Release](#) N (empty page)
  - [Getting Started with Tungsten Fabric 5.0.1](#) Y (move under *Quickstart / Getting started* for the correct documentation branch /version)
  - [Release Notes: Tungsten Fabric 5.0.1](#) Y (move under *Release Notes* for the correct documentation branch/version)
    - [Table of Contents](#) N (empty page)
    - [Introduction](#) N (empty page)
    - [New and Changed Features](#) Y
    - [Supported Platforms Tungsten Fabric 5.0](#) Y
    - [Known Behavior](#) Y
    - [Resolved Issues](#) Y
    - [Deprecated Items](#) Y
    - [Requesting Technical Support](#) N (contact will be covered by *Get in touch*)
- [Tungsten Fabric 5.0 Release](#) N (empty page)
  - [Release Notes: Tungsten Fabric 5.0](#) Y (move under *Release Notes* for the correct documentation branch/version)
    - [Table of Contents](#) N (empty page)
    - [Introduction](#) N (empty page)
    - [New and Changed Features](#) Y
    - [Supported Platforms Tungsten Fabric 5.0](#) Y
    - [Known Behavior](#) Y
    - [Resolved Issues](#) Y
    - [Deprecated Items](#) Y
    - [Requesting Technical Support](#) N (contact will be covered by *Get in touch*)
- [Contribute to Tungsten Fabric](#) N (empty page)
  - [Getting Started as a Contributor](#) N (empty page)
    - [Getting Started as a Developer](#) Y (move under *Building the code*)
  - [Processes before submitting a blueprint](#) Y (move under *Get in touch*)
  - [Blueprint Submission](#) Y (move under *Get in touch*)
  - [Code Submission](#) Y (move under *Get in touch*)
  - [Test plan Submission](#) Y (move under *Get in touch*)
  - [Tungsten Fabric JIRA workflow](#) N (JIRA workflow is visible in the Jira itself, description of the task type is clear and PTL can always correct wrongly assigned type, workflow for Blueprints should be covered in *Blueprint submission*)
  - [How to review a patch in Gerrit](#) Y (move under *Building the code*)
- [Infrastructure](#) N (will be superseded by *Infrastructure Guide*)
- [Administration](#) N (will be superseded by *Gerrit Guide, Integration Testing Guide, Integration Distribution Guide, Integration Packaging Guide*)
- [Tungsten Fabric Governance](#) Y (will go to Wiki)
  - [Tungsten Fabric Architecture Review Board](#) Y (will go to Wiki)
    - [ARB members](#) Y (will go to Wiki)
  - [Tungsten Fabric Governance Working Group](#) Y (will go to Wiki)
    - [Governance Resolutions](#) Y (will go to Wiki)
    - [Community Committee Members](#) Y (will go to Wiki)
  - [Tungsten Fabric Community Infrastructure Working Group](#) Y (will go to Wiki)
  - [Tungsten Fabric Technical Steering Committee Working Group](#) Y (will go to Wiki)
    - [Technical Steering Committee Working Group Resolutions](#) Y (will go to Wiki)
    - [Technical Committee Members](#) Y (will go to Wiki)
    - [Project Team Leads](#) Y (will go to Wiki)
- [Manual CLA Administration](#) Y (will go to either *Get in touch* or *Developer Documentation*)

2. [Tungstenfabric/tf-transitional-contrail-docs/doc/release-notes/](#) N (already incorporated into tungstenfabric/docs)

3. [Tungstenfabric/tf-transitional-contrail-docs/doc/getting-started-guide/](#) M (might be useful as legacy documentation but the newer version is mentioned in point 12)

- Overview
  - Understanding Tungsten Fabric
    - [Tungsten Fabric Overview](#)
    - [Tungsten Fabric Description](#)
- Installing and Upgrading Tungsten Fabric
  - Server Requirements and Supported Platforms
    - [Server Requirements and Supported Platforms](#)
  - Installing Tungsten Fabric and Provisioning Roles
    - [Introduction to Containerized Tungsten Fabric Modules](#)
    - [Downloading Installation Software](#)
    - [Overview of contrail-ansible-deployer used in Contrail Command for Installing Tungsten Fabric with Microservices Architecture](#)
    - [Installing Tungsten Fabric with OpenStack and Kolla Ansible](#)
    - [Supporting Multiple Interfaces on Servers and Nodes](#)
    - [Configuring the Control Node with BGP](#)
    - [Adding a New Node to an Existing Containerized Tungsten Fabric Cluster](#)
    - [Using contrailctl to Configure Services Within Containers](#)

- [Tungsten Fabric Global Controller](#)
    - [Role and Resource-Based Access Control](#)
  - Installation and Configuration Scenarios
    - [Setting Up and Using a Simple Virtual Gateway with Release 4.0](#)
    - [Simple Underlay Connectivity without Gateway](#)
    - [Dynamic Kernel Module Support \(DKMS\) for vRouter](#)
  - Upgrading Tungsten Fabric Software
  - Contrail Command
  - Using Tungsten Fabric with Red Hat
- Configuring Tungsten Fabric
  - Configuring Virtual Networks
    - [Creating Projects in OpenStack for Configuring Tenants in Tungsten Fabric](#)
    - [Creating a Virtual Network with Tungsten Fabric](#)
    - [Creating a Virtual Network with OpenStack Tungsten Fabric](#)
    - [Creating an Image for a Project in OpenStack Tungsten Fabric](#)
    - [Creating a Floating IP Address Pool](#)
    - [Using Security Groups with Virtual Machines \(Instances\)](#)
    - [Support for IPv6 Networks in Tungsten Fabric](#)
    - [Configuring EVPN and VXLAN](#)
  - Example of Deploying a Multi-Tier Web Application Using Tungsten Fabric
    - [Example:Deploying a Multi-Tier Web Application](#)
    - [Sample Network Configuration for Devices for Simple Tiered Web Application](#)
  - Configuring Services
    - [Configuring DNS Servers](#)
    - [Support for Multicast](#)
    - [Using Static Routes with Services](#)
    - [Configuring Metadata Service](#)
  - Configuring Service Chaining
    - [Service Chaining](#)
    - [Service Chaining MX Series Configuration](#)
    - [ECMP Load Balancing in the Service Chain](#)
    - [Customized Hash Field Selection for ECMP Load Balancing](#)
    - [Using the Tungsten Fabric Heat Template](#)
    - [Service Chain Route Reorigination](#)
    - [Service Instance Health Checks](#)
  - Examples: Configuring Service Chaining
- Monitoring and Troubleshooting the Network Using Tungsten Fabric Analytics
  - Understanding Tungsten Fabric Analytics
    - [Understanding Tungsten Fabric Analytics](#)
    - [Tungsten Fabric Alerts](#)
    - [Underlay Overlay Mapping in Tungsten Fabric](#)
  - Configuring Tungsten Fabric Analytics
    - [Analytics Scalability](#)
    - [High Availability for Analytics](#)
    - [Role-Based Access Control for Analytics](#)
    - [System Log Receiver in Tungsten Fabric Analytics](#)
    - [Sending Flow Messages to the Tungsten Fabric System Log](#)
    - [More Efficient Flow Queries](#)
    - [Ceilometer Support in a Tungsten Fabric Cloud](#)
  - Using Tungsten Fabric Analytics to Monitor and Troubleshoot the Network
    - [Monitoring the System](#)
    - [Debugging Processes Using the Tungsten Fabric Introspect Feature](#)
    - [Monitor > Infrastructure > Dashboard](#)
    - [Monitor > Infrastructure > Control Nodes](#)
    - [Monitor > Infrastructure > Virtual Routers](#)
    - [Monitor > Infrastructure > Analytics Nodes](#)
    - [Monitor > Infrastructure > Config Nodes](#)
    - [Monitor > Networking](#)
    - [Query > Flows](#)
    - [Query > Logs](#)
    - [Example:Debugging Connectivity Using Monitoring for Troubleshooting](#)

#### 4. <http://wiki.tungsten.io>

- [Glossary Abbreviations Definitions](#) Y (move under *Glossary*)

#### 5. <https://github.com/tungstenfabric/website> (exposed on <https://tungstenfabric.github.io>)

- [website/Carbide/CEG/docs/index.md](#) Y (Where should it go???)
- [website/Carbide/CEG/docs/use\\_case\\_1.md](#) Y (move under *Use cases*)
- [website/Carbide/CEG/docs/use\\_case\\_2.md](#) Y (move under *Use cases*)

- [website/Carbide/CEG/docs/use\\_case\\_3.md](#) Y (move under *Use cases*)
- [website/Carbide/CEG/docs/use\\_case\\_4.md](#) Y (move under *Use cases*)
- [website/Tungsten-Fabric-15-minute-deployment-with-k8s-on-AWS.md](#) Y (move under *Installation options*)
- [website/Tungsten-Fabric-Centos-one-line-install-on-k8s.md](#) Y (move under *Installation options*)
- [website/Tungsten-Fabric-Ubuntu-one-line-install-on-k8s.md](#) Y (move under *Installation options*)
- [website/Tungsten-Fabric-Architecture.md](#) Y (move under *Architectural overview*)
- [website/L10N/Tungsten-Fabric-Architecture-CN.md](#) M (discuss is there a reason for having just one page in other languages)

6. <https://github.com/Juniper/contrail-controller/>

- <https://github.com/Juniper/contrail-controller/wiki/Kubernetes> Y (Where should it go???)
- <https://github.com/Juniper/contrail-controller/wiki/Install-K8s-using-Kubeadm> Y (should it go under *Installation options*???)

<https://github.com/tungstenfabric/tf-ansible-deployer> M (all below materials should be checked if they are valid for latest version or should they be archived)

- [tf-ansible-deployer/README.md](#) M (should be checked if it's valid for latest version or should they be archived)
- [tf-ansible-deployer/README\\_vcenter.md](#) M (should be checked if it's valid for latest version or should they be archived)
- [tf-ansible-deployer/README\\_ziu.md](#) M (should be checked if it's valid for latest version or should they be archived)
- [tf-ansible-deployer/contrail\\_configuration.md](#) M (should be checked if it's valid for latest version or should they be archived)
- [tf-ansible-deployer/examples/aws1.md](#) M (should be checked if it's valid for latest version or should they be archived)
- [tf-ansible-deployer/examples/aws2.md](#) M (should be checked if it's valid for latest version or should they be archived)
- [tf-ansible-deployer/examples/aws\\_k8s.md](#) M (should be checked if it's valid for latest version or should they be archived)
- [tf-ansible-deployer/examples/gce1.md](#) M (should be checked if it's valid for latest version or should they be archived)
- [tf-ansible-deployer/examples/kvm1.md](#) M (should be checked if it's valid for latest version or should they be archived)
- [tf-ansible-deployer/examples/mesos\\_bms.md](#) M (should be checked if it's valid for latest version or should they be archived)
- <https://github.com/Juniper/contrail-ansible-deployer/wiki/Contrail-with-Openstack-Kolla> N (already incorporated in the Wiki folder)
- <https://github.com/Juniper/contrail-ansible-deployer/wiki/Debugging-contrail-code-in-contrail-microservice> N (already incorporated in the Wiki folder)

8. <https://github.com/tungstenfabric/tf-vnc>

- <http://juniper.github.io/contrail-vnc/README.html> Y (should it be moved to *Building from source* ???)

9. <https://contrail-api-cli.readthedocs.io> M (should be checked if it's valid for latest version or should they be archived)

10. [https://www.juniper.net/documentation/en\\_US/contrail20/information-products/pathway-pages/api-guide-2005/index.html#](https://www.juniper.net/documentation/en_US/contrail20/information-products/pathway-pages/api-guide-2005/index.html#) M (should be checked if it's valid for latest version or should they be archived)

11. Contrail Networking Architecture Guide

- [https://www.juniper.net/documentation/en\\_US/release-independent/solutions/information-products/pathway-pages/sg-010-contrail-networking-arch-guide.pdf](https://www.juniper.net/documentation/en_US/release-independent/solutions/information-products/pathway-pages/sg-010-contrail-networking-arch-guide.pdf)

12. [https://www.juniper.net/documentation/en\\_US/contrail5.0/topics/concept/overview-virtual-network-controller.html](https://www.juniper.net/documentation/en_US/contrail5.0/topics/concept/overview-virtual-network-controller.html)

- Overview
  - Understanding Contrail Controller
    - [Contrail Overview](#)
    - [Contrail Description](#)
- Installing and Upgrading Contrail
  - Supported Platforms and Server Requirements
    - [Server Requirements and Supported Platforms](#) N (will be incorporated in release notes)
  - Installing Contrail and Provisioning Roles
    - [Introduction to Containerized Contrail Modules](#)
    - [Introduction to Contrail Microservices Architecture](#)
    - [Downloading Installation Software](#)
    - [Overview of contrail-ansible-deployer used in Contrail Command for Installing Contrail with Microservices Architecture](#)
    - [Installing Contrail with OpenStack and Kolla Ansible](#)
    - [Supporting Multiple Interfaces on Servers and Nodes](#)
    - [Configuring the Control Node with BGP](#)
    - [Adding a New Node to an Existing Containerized Contrail Cluster](#)
    - [Contrail Global Controller](#)
    - [Role and Resource-Based Access Control](#)
  - Installation and Configuration Scenarios
    - [Setting Up and Using a Simple Virtual Gateway with Contrail 4.0](#)
    - [Configuring MD5 Authentication for BGP Sessions](#)
    - [Configuring the Data Plane Development Kit \(DPDK\) Integrated with Contrail vRouter](#)
    - [Configuring Contrail DPDK vRouter to Run in a Docker Container](#)
    - [Configuring Single Root I/O Virtualization \(SR-IOV\)](#)
    - [Configuring Virtual Networks for Hub-and-Spoke Topology](#)
    - [Configuring Transport Layer Security-Based XMPP in Contrail](#)
    - [Configuring Graceful Restart and Long-lived Graceful Restart](#)
    - [Remote Compute](#)

- [Dynamic Kernel Module Support \(DKMS\) for vRouter](#)
  - Upgrading Contrail Software
    - [Contrail In-Service Software Upgrade from Releases 3.2 and 4.1 to 5.0.x using Ansible Deployer](#)
    - [Contrail In-Service Software Upgrade from Releases 3.2 and 4.1 to 5.0.x using Helm Deployer](#)
  - Backup and Restore Contrail Software
    - [Backing up Contrail Databases in JSON Format](#)
  - Multicloud Contrail **N** (this is proprietary software of Juniper)
    - [Contrail Deployment on Microsoft Azure](#) **N** (this is proprietary software of Juniper)
    - [Deploying Contrail on Microsoft Azure](#) **N** (this is proprietary software of Juniper)
    - [On-Premise and Azure Multicloud Deployment](#) **N** (this is proprietary software of Juniper)
    - [Modifying Multicloud Topology](#) **N** (this is proprietary software of Juniper)
    - [Deploying Contrail Enterprise Multicloud using REST API](#) **N** (this is proprietary software of Juniper)
  - Using Contrail with Kubernetes
    - [Contrail Integration with Kubernetes](#)
    - [Installing and Managing Contrail 5.0 Microservices Architecture Using Helm Charts](#)
    - [Provisioning of Kubernetes Clusters](#)
    - [Using Helm Charts to Provision Multinode Contrail OpenStack Ocata with High Availability](#)
    - [Using Helm Charts to Provision All-in-One Contrail with OpenStack Ocata](#)
    - [Accessing a Contrail OpenStack Helm Cluster](#)
    - [Frequently Asked Questions About Contrail and Helm Charts](#)
    - [Contrail Deployment with Helm](#)
    - [Verifying Configuration for CNI for Kubernetes](#)
    - [Kubernetes Updates to IP Fabric](#)
    - [Implementation of Kubernetes Network Policy with Contrail Firewall Policy](#)
  - Using VMware vCenter with Containerized Contrail
    - [vCenter Integration for Contrail Release 5.0](#)
    - [vCenter Integration for Contrail Release 5.0.1](#)
    - [vCenter Integration for Contrail Release 5.0.2](#)
    - [Underlay Network Configuration for Contrail VM](#)
    - [Using the Contrail and VMware vCenter User Interfaces to Manage the Network For Contrail Releases 5.0 and 5.0.1](#)
    - [Using the Contrail and VMware vCenter User Interfaces to Manage the Network For Contrail Release 5.0.2](#)
    - [Integrating Contrail Release 5.0.X with VMware vRealize Orchestrator](#)
    - [Installing and Provisioning Contrail VMware vRealize Orchestrator Plugin](#)
  - Using Contrail with Red Hat
    - [Deploying Contrail with Red Hat OpenStack Platform Director 13](#)
    - [Provisioning Red Hat OpenShift Container Platform Clusters Using Ansible Deployer](#)
  - Contrail and AppFormix Kolla/Ocata OpenStack Deployment **N** (this is proprietary software of Juniper)
    - [Contrail and AppFormix Deployment Requirements](#) **N** (this is proprietary software of Juniper)
    - [Preparing for the Installation](#) **N** (this is proprietary software of Juniper)
    - [Run the Playbooks](#) **N** (this is proprietary software of Juniper)
    - [Accessing Contrail in AppFormix Management Infrastructure in UI](#) **N** (this is proprietary software of Juniper)
    - [Notes and Caveats](#) **N** (this is proprietary software of Juniper)
    - [Example Instances.yml for Contrail and AppFormix OpenStack Deployment](#) **N** (this is proprietary software of Juniper)
    - [Installing AppFormix for OpenStack](#) **N** (this is proprietary software of Juniper)
    - [Installing AppFormix for OpenStack in HA](#) **N** (this is proprietary software of Juniper)
  - Using Contrail with Juju Charms
    - [Deploying Contrail by Using Juju Charms](#)
  - Contrail Command **N** (Tungsten doesn't have Contrail Command)
    - [Configuring Contrail Command](#) **N** (Tungsten doesn't have Contrail Command)
    - [Deploying Contrail Cluster using the Contrail Command UI](#) **N** (Tungsten doesn't have Contrail Command)
    - [Deploying Contrail Cluster using Contrail-Command and instances.yml](#) **N** (Tungsten doesn't have Contrail Command)
    - [Importing Contrail Cluster Data using Contrail Command](#) **N** (Tungsten doesn't have Contrail Command)
  - Extending Contrail to Physical Routers, Bare Metal Servers, Switches, and Interfaces
    - [Understanding Bare Metal Server Management](#)
    - [Configuring High Availability for the Contrail OVSDb ToR Agent](#)
    - [Using Device Manager to Manage Physical Routers](#)
    - [SR-IOV VF as the Physical Interface of vRouter](#)
    - [Using Gateway Mode to Support Remote Instances](#)
    - [REST APIs for Extending the Contrail Cluster to Physical Routers, and Physical and Logical Interfaces](#)
  - Contrail for Data Center Automation and Fabric Management
    - [Understanding Underlay Management](#)
    - [Support for Intent Driven Automation Functionality using Ansible](#)
    - [Providing Intent Driven Automation Capabilities on Physical Network Elements](#)
    - [Configuring QFX10000 as a Data Center Gateway](#)
- Contrail Security
  - [Security Policy Enhancements](#)
- Configuring Contrail
  - Configuring Virtual Networks

- [Creating Projects in OpenStack for Configuring Tenants in Contrail](#)
  - [Creating a Virtual Network with Juniper Networks Contrail](#)
  - [Creating a Virtual Network with OpenStack Contrail](#)
  - [Creating an Image for a Project in OpenStack Contrail](#)
  - [Creating a Floating IP Address Pool](#)
  - [Using Security Groups with Virtual Machines \(Instances\)](#)
  - [Support for IPv6 Networks in Contrail](#)
  - [Configuring EVPN and VXLAN](#)
  - [Support for EVPN Route Type 5](#)
  - [vRouter to vRouter Data Encryption](#)
- [Example of Deploying a Multi-Tier Web Application Using Contrail](#)
  - [Example: Deploying a Multi-Tier Web Application](#)
  - [Sample Network Configuration for Devices for Simple Tiered Web Application](#)
- [Configuring Services](#)
  - [Configuring DNS Servers](#)
  - [Distributed Service Resource Allocation with Containerized Contrail](#)
  - [Support for Multicast](#)
  - [Using Static Routes with Services](#)
  - [Configuring Metadata Service](#)
- [Configuring Service Chaining](#)
  - [Service Chaining](#)
  - [Service Chaining MX Series Configuration](#)
  - [ECMP Load Balancing in the Service Chain](#)
  - [Customized Hash Field Selection for ECMP Load Balancing](#)
  - [Service Chain Version 2 with Port Tuple](#)
  - [Using the Contrail Heat Template](#)
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  - [Service Instance Health Checks](#)
- [Examples: Configuring Service Chaining](#)
  - [Example: Creating an In-Network Service Chain](#)
  - [Example: Creating an In-Network-NAT Service Chain](#)
  - [Example: Creating a Transparent Service Chain](#)
- [Adding Physical Network Functions in Service Chains](#)
  - [Using Physical Network Functions in Contrail Service Chains](#)
  - [Example: Adding a Physical Network Function Device to a Service Chain](#)
- [Configuring High Availability](#)
  - [Juniper OpenStack High Availability](#)
  - [High Availability Support Options](#)
  - [High Availability for Containerized Contrail](#)
- [QoS Support in Contrail](#)
  - [Quality of Service in Contrail](#)
  - [Configuring Network QoS Parameters](#)
  - [BGP as a Service](#)
  - [BGP as a Service in Contrail Release 3.1](#)
- [Load Balancers](#)
  - [Using Load Balancers in Contrail](#)
  - [Support for OpenStack LBaaS Version 2.0 APIs](#)
  - [Configuring Load Balancing as a Service in Contrail](#)
- [Optimizing Contrail](#)
  - [Route Target Filtering](#)
  - [Source Network Address Translation \(SNAT\)](#)
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- [Monitoring and Troubleshooting Contrail](#)
  - [Configuring Traffic Mirroring to Monitor Network Traffic](#)
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    - [Configuring Interface Monitoring and Mirroring](#)
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    - [Mapping VLAN Tags from a Physical NIC to a VMI \(NIC-Assisted Mirroring\)](#)
  - [Understanding Contrail Analytics](#)
    - [Understanding Contrail Analytics](#)
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  - [Configuring Contrail Analytics](#)
    - [Analytics Scalability](#)
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- [Sending Flow Messages to the Contrail System Log](#)
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  - [User Configuration for Analytics Alarms and Log Statistics](#)
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  - [Node Memory and CPU Information](#)
  - [Role- and Resource-Based Access Control for the Contrail Analytics API](#)
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  - [Monitor > Infrastructure > Dashboard](#)
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  - [Troubleshooting Link-Local Services in Contrail](#)
- [Contrail Commands and APIs](#)
  - [Contrail Commands](#) **N** (Tungsten doesn't have Contrail Command)
    - [Getting Contrail Node Status](#) **N** (Tungsten doesn't have Contrail Command)
    - [contrail-logs \(Accessing Log File Messages\)](#) **N** (Tungsten doesn't have Contrail Command)
    - [contrail-status \(Viewing Node Status\)](#) **N** (Tungsten doesn't have Contrail Command)
    - [contrail-version \(Viewing Version Information\)](#) **N** (Tungsten doesn't have Contrail Command)
    - [service \(Managing Services\)](#) **N** (Tungsten doesn't have Contrail Command)
    - [Backing Up Contrail Databases Using JSON Format](#) **N** (Tungsten doesn't have Contrail Command)
  - [Contrail Application Programming Interfaces \(APIs\)](#)
    - [Contrail Analytics Application Programming Interfaces \(APIs\) and User-Visible Entities \(UVEs\)](#)
    - [Log and Flow Information APIs](#)
    - [Working with Neutron](#)
    - [Support for Amazon VPC APIs on Contrail OpenStack](#)
- [Downloads](#) **N** (currently there is no plan to use PDF as documentation)
  - [Download this guide: Contrail Feature Guide](#) **N** (currently there is no plan to use PDF as documentation)

13. [Release notes \(https://www.juniper.net/documentation/en\\_US/contrail20/information-products/topic-collections/release-notes/jd0e23.html#jd0e23\)](https://www.juniper.net/documentation/en_US/contrail20/information-products/topic-collections/release-notes/jd0e23.html#jd0e23)

- [Release Notes: Contrail Networking 2005.1](#)
  - [Introduction](#) **N** (abundant)
  - [New and Changed Features](#)
    - [New and Changed Features in Contrail Networking Release 2005.1](#)
    - [New and Changed Features in Contrail Networking Release 2005](#)
      - [Inter Subcluster Route Filtering](#)
      - [Kubernetes 1.14.8 Support](#)
  - [Supported Platforms in Contrail Networking Release 2005](#)
  - [Known Behavior](#)
    - [Known Behavior in Contrail Networking Release 2005.1](#)
    - [Known Behavior in Contrail Networking Release 2005](#)
  - [Resolved Issues](#)
  - [Documentation Updates](#)
    - [Contrail Insights Available in hub.juniper.net](#)
    - [Contrail Command Screenshots](#)
  - [Documentation Feedback](#)
  - [Requesting Technical Support](#)
  - [Revision History](#)

14. <https://github.com/tonyliu0592/contrail/wiki/API-Configuration>

- <https://github.com/tonyliu0592/contrail/wiki/API-Configuration> **Y** (Where should it go???)
- <https://github.com/tonyliu0592/contrail/wiki/API-Configuration-REST> **Y** (Where should it go???)
- <https://github.com/tonyliu0592/contrail/wiki/API-Configuration-Python> **Y** (Where should it go???)



15. <https://github.com/tungstenfabric/docs-backup> **N** (already incorporated into tungstenfabric/docs)

16. <https://github.com/tungstenfabric/opencontrails-docs> **N** (already incorporated into tungstenfabric/docs)

17. [tungstenfabric/tf-old-docs](#)

- doc **N** (already incorporated into tungstenfabric/docs)
- wiki **N** (already moved to tungstenfabric/docs but, later it will be reviewed and incorporated into documentation structure)