CenturyLink® Cloud Connect: eLynk to Oracle Fast Connect

Direct, Secure, Private Connection to Oracle Cloud

Content
Purpose (page 2)
Contents / Steps with links (page 3)
Getting Started (pages 4-5)
Virtual Interfaces w/ Topology (pages 6-7)
Roles and Responsibilities (page 8)
Obtaining your OCID (page 9)
Requesting CTL Cloud Connect (page 10)
Provision Cloud Connect to Oracle (page 11)
Oracle OCI / FastConnect Resources (page 12)

April 8th, 2019
The purpose of this document is to provide an end-to-end walk through for a customer connecting to Oracle Cloud Infrastructure (OCI) via FastConnect for the first time via CenturyLink’s eLynk Cloud Connect.

Information contained is provided to serve as a supplement to Oracle documentation linked throughout this document. Users should check the provided links to obtain the most up-to-date information and for more details pertaining to Oracle processes.

Disclaimer: The material in this guide is for informational purposes only and is taken from Oracle’s website material. All Oracle related configuration information is based off of the Oracle Console configuration instructions from the Oracle website.
Contents / Steps

1. What is FastConnect
2. Getting Started with Oracle FastConnect
3. Private Virtual Circuit - eLynk Cloud Connect to Oracle Cloud Infrastructure (OCI) FastConnect
4. Public Virtual Circuit - eLynk Cloud Connect to Oracle Cloud Infrastructure (OCI) FastConnect
5. Roles and Responsibilities
6. Creating the Oracle FastConnect to obtain an OCID
7. Customer requests CenturyLink eLynk Cloud Connect service
8. CenturyLink Provisions eLynk Cloud Connect service to Oracle
9. Additional Oracle FastConnect Resources
1) What is Oracle FastConnect?

“Oracle FastConnect is a network connectivity alternative to using the public internet for connecting your network with Oracle Cloud Infrastructure and other Oracle Cloud services.

FastConnect provides an easy, elastic, and economical way to create a dedicated and private connection with higher bandwidth options, and a more reliable and consistent networking experience when compared to internet-based connections.

Use Oracle FastConnect to extend your existing private networks to Oracle Cloud Infrastructure, via provider networks. “
2) Getting Started with Oracle FastConnect with an Oracle Provider

- This document is for eLynk (point to point Ethernet Virtual Private Line / EVPL) service from a customer location to Oracle Cloud Infrastructure (OCI).
- The supporting service ordered from CenturyLink is eLynk Cloud Connect service to Oracle.
- The service ordered from Oracle is FastConnect.
- Within Oracle documentation the service is called FastConnect with an Oracle Provider (Partner).
- CenturyLink is a Layer 2 solution.
- BGP is used to exchange routing information between Oracle and the customer premises network. BGP peering is between the customer premise equipment and the Oracle OCI environment.
- Oracle assumes the customer already has connectivity between their premise location(s) and CenturyLink. The eLynk Cloud Connect service to Oracle will satisfy this assumption.
- CenturyLink does not resell the Oracle FastConnect or OCI services. Customers must order FastConnect and OCI services directly from Oracle.
- High Level steps for provisioning include:  (*greater details are found throughout this document*)

- Customer orders eLynk Cloud Connect to Oracle Cloud Infrastructure (OCI) from their CenturyLink Account Team.
- **Customer configures FastConnect in the Oracle Console**
- CenturyLink provisions the point to point, layer 2, eLynk Cloud Connect Service and requests the Oracle FastConnect ID (OCID) from the customer.
- CenturyLink completes provisioning and activation of the service within the Oracle OCI Provider Portal. This links the eLynk Cloud Connect circuit to the customer’s Oracle FastConnect service.
3) Private Virtual Circuit - eLynk Cloud Connect to Oracle Cloud Infrastructure (OCI) FastConnect

- Customer must allocate IP addresses for the Private Virtual Circuit as required by Oracle.
- Customer to allocate the Autonomous System Number (ASN) required by Oracle.
- Customer must configure IP’s/ASN/BGP appropriately on their required layer 3 device at the premise and within their OCI environment via the Oracle Console.
- BGP peering is between customer and Oracle. CenturyLink does not participate at layer 3 routing with this service type.
4) Public Virtual Circuit - eLynk Cloud Connect to Oracle Cloud Infrastructure (OCI) FastConnect

- eLynk Cloud Connect could be used to connect to Oracle Public Services as well by defining a Public Virtual Circuit in the Oracle Console.

- For Public Peering customer is responsible for the following:
  - Any NAT configuration on the Customer Premises network/equipment.
  - Customer must have their own allocated/registered public IP Subnets that will be advertised via BGP peering. (note: CenturyLink does not assign public IP addresses to this layer 2 service)
  - Customer to obtain and provide public ASN number
  - Oracle provides IP addresses to address the Public Virtual Circuit for BGP peers only
5) Roles and Responsibilities

<table>
<thead>
<tr>
<th>STEPS REQUIRED TO SET UP CLOUD CONNECT TO ORACLE FASTCONNECT</th>
<th>END CUSTOMER</th>
<th>CENTURYLINK</th>
<th>Oracle</th>
</tr>
</thead>
<tbody>
<tr>
<td>SET UP CONNECTIVITY TO ORACLE FASTCONNECT LOCATION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Order CenturyLink eLynk Cloud Connect service(s) to Oracle Cloud Infrastructure</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Create FastConnect Virtual Circuit via Oracle Console. Once created the console will generate an Oracle ID (OCID)—Virtual circuit could be private or public</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Provide the OCID to CenturyLink upon request</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Create eLynk Cloud Connect circuit per customer order, linking it to the customers OCID for FastConnect</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Update Virtual Circuit attributes via OCI Provider Portal</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>SET UP BGP PEERING BETWEEN CUSTOMER EDGE AND ORACLE EDGE DEVICE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Configure BGP Peering on Customer Layer 3 Device facing Oracle</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Configure Virtual Cloud Network (VCN) in the Oracle Console to allow subnets to forward traffic to the customer premises network via FastConnect. This includes routing and access lists.</td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
6) Creating **FastConnect with an Oracle Provider** to obtain an OCID

- For instructions on how to create an Oracle FastConnect and obtain the required OCID please see this page → **FastConnect with an Oracle Provider** (summary below)

Customer performs the following tasks within the Oracle Console

1. Log into OCI Console
2. Create a Virtual Cloud Network (VCN)*
3. Create a DRG and attach to VCN*
4. Create a FastConnect connection with the proper Virtual Circuit (private or public)
5. Enter Details
6. Copy Oracle Cloud ID (OCID) – Share this OCID with the CenturyLink Provisioning team upon their request
7. Update/Create a route rule to include customer premises subnets pointing to the DRG as the next hop

*Steps 2 and 3 are prerequisites for creating a FastConnect virtual circuit. Subsequent FastConnects can jump down to step 5

- Reference the **FastConnect with an Oracle Provider guide** for any issues/questions as you proceed.
7) Customer requests CenturyLink eLynk Cloud Connect service

- To order a CenturyLink eLynk Cloud Connect to Oracle Cloud Infrastructure, contact your CenturyLink Account Representative

- Oracle service(s) you can connect to:
  - Virtual Cloud Network (VCN) via a Private Virtual Circuit
  - Oracle Public Services like Object Storage via a Public Virtual Circuit

- Determine the amount of bandwidth needed on the eLynk EVC to Oracle
  - Note: Maximum bandwidth per eLynk EVC is 3Gb
  - Oracle sells either 10G or 1G virtual Circuits.
  - Oracle does not perform Rate limiting.
    - example: If customer wants 3G of bandwidth they should order 10G from Oracle, and 3G from CenturyLink

- Which Oracle Region and/or FastConnect location do you require connectivity to and if it is commercial or government

- What contractual term length is desired (1yr, 3yr, 5yr etc…)

- Information needed by CenturyLink to complete the order/connection:
  - OCID (Oracle Cloud Identifier)
    - This is requested by the CenturyLink provisioning team once the order is submitted.
    - Customer obtains the OCID from the Oracle Console when the Virtual Circuit is created
8) CenturyLink Provisions eLynk Cloud Connect to Oracle

- Upon network order submission, CenturyLink will provision a Layer 2 eLynk Ethernet Virtual Circuit (EVC) to be terminated to the appropriate FastConnect location (Oracle Region) per the order.

- CenturyLink will request the Oracle OCID from the customer to complete provisioning.
  - see instructions on obtaining the OCID on step 6 on page 9 of this document

- Upon completion of the provisioning, CenturyLink will provide the following information documenting what has been configured within the Oracle environment via the Oracle Provider Portal:
  - Order# / Circuit ID
  - Circuit ID in the “Reference Comment” field
  - The “Cross Connect Group or Cross Connect” details
  - The VLAN ID
  - Any scheduling information if a coordinated activation was requested
  - Instructions for contacting CenturyLink with questions or for any service activations issues

Configuration of all required IP addressing and BGP routing on the customers layer 3 device at their premise location and within the Oracle Console will be the responsibility of the customer. The customer is also responsible for any/all NAT configurations required for Oracle public services.

- On the Oracle Console, customer is able to see the state of the virtual circuit lifecycle state (provisioning or provisioned), the provider state (Active or Pending Provider), and the BGP state (Down).
# 9) Additional Oracle OCI FastConnect Resources

<table>
<thead>
<tr>
<th>FastConnect with an Oracle Provider information and how to</th>
<th><a href="https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/fastconnectprovider.htm">https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/fastconnectprovider.htm</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>FastConnect Documentation</td>
<td><a href="https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/fastconnect.htm">https://docs.cloud.oracle.com/iaas/Content/Network/Concepts/fastconnect.htm</a></td>
</tr>
</tbody>
</table>
| Oracle OCI Support Contacts | **OCI NOC**  
  Direct: +1.512.712.7403  
  [cloud_noc_us_grp@oracle.com](mailto:cloud_noc_us_grp@oracle.com)  
  **OCI FastConnect Support**  
  [bmc_fastconnect_admins_us_grp@oracle.com](mailto:bmc_fastconnect_admins_us_grp@oracle.com) |