Revel provides our clients a pre-configured, turn-key system which includes a router, switches, access points, etc., in addition to the Point of Sale stations and their peripherals.

Revel understands, in some situations, our clients may already operate a network, and it makes sense for them to leverage that infrastructure for their Revel Point of Sale system.

While Revel cannot directly support these custom configurations, we do want to see our clients succeed by leveraging their own infrastructure or by working with a third party infrastructure provider. This document outlines how to configure a network suitable for Revel’s Point of Sale in a way that facilitates simple and reliable operation.  
  
Whitelisting should be based on the DNS name of URLs. The firewall should dynamically check for IP address updates at least every 60 seconds. Generally, it is not recommended to hard-code IP addresses, as these can change over time.

### **Contents**

* General POS Requirements
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### **General POS Requirements**

| **Originating Device / Service** | **Port/Protocol** | **URL** |
| --- | --- | --- |
| Management console access | 443/TCP | \*.revelup.com |
| Revel Services | 443/TCP | \*.revelup.io |
| POS Logging | 443/TCP | \*.browser-intake-datadoghq.com |
| Receipt images such as QR Codes | 443/TCP | https://revelup-images-other.s3.amazonaws.com/ |
| Communication | 80/TCP | \*.revelsystems.com |
| SMTP Relay | 3535/TCP | smtpbox.revelup.com |
| WebSockets Hub - Service used to notify POS stations of events, ie. order updates, CaptainAI (Delivery XT) driver updates. | 8443/TCP | https://wshub-cloud.revelup.com |
| Print Coordinator Service | 49001/TCP |  |

### **Payment & Gift Card Processing**

| **Originating Device / Service** | **Port/Protocol** | **URL** |
| --- | --- | --- |
| Adyen | 443/8443 | \*.adyen.com  \*.adyenpayments.com  Allow listing should be based on the DNS name of these URLs. Your firewall should dynamically check for IP address updates, at least every 60 seconds  Reference Doc:  https://docs.adyen.com/point-of-sale/design-your-integration/network-and-connectivity/network-configuration |
| Mercury Gift Cards | 9100/TCP | https://w1.mercurypay.com/  https://w1.backuppay.com/  https://w2.backuppay.com/  https://w2.mercurypay.com/  Mercury backuppay.com 80, 443 mercurypay.com 80, 443 Mercury Gift Cards 9100 |
| GiveX Gift Cards | 50042/TCP  50104/TCP  443/TCP  8443/TCP | \*.revelup.com  \*.revelup.io  and your own Givex host from your Management Console settings (include 50104 port number, NOT THE ONE IN MANAGEMENT CONSOLE SETTINGS) |
| USAePay | 80  443  4443/TCP | www.usaepay.com 209.220.191.7  secure.usaepay.com 209.220.191.8  www-02.usaepay.com 209.220.191.9 |
| FreedomPay: | 443/HTTPS | \*.freedompay.com |
| WorldPay: | 443/HTTPS | \*.elementexpress.com/  https://transaction.hostedpayments.com/  https://gateway.securenet.com/  https://gwapi.securenet.com/ |

### **Gift & Loyalty:**

| **Originating Device / Service** | **Port/Protocol** | **URL** |
| --- | --- | --- |
| Valutec | 443/HTTPS | https://ws.valutec.net/Valutec.asmx  https://ws.valutec.net/ |
| Givex: | 50042 |  |
| Loyaltree: | 443/HTTPS | https://devposapi.loyaltree.com  Note: these urls can be changed on MC. |
| Vantiv/Mercury: | 443/HTTPS | https://w1.mercurydev.net/ws/ws.asmx  Note: these urls can be changed on MC. |
| Paytronix: | 1283/HTTPS | https://www.train.paytronix.com:1283  Note: these urls can be changed on MC. |
| Synergy: Gift/Reward | 80/HTTP | http://www.synergywebservice.com/SynergyWebX.asmx |
| LevelUp: | 443/HTTPS | https://api.thelevelup.com/v15 |
| Punchh: | 443/HTTPS | https://api.punchh.com/api/pos  https://isl.punchh.com |
| Como | Please reach out to Como for this information | Please reach out to Como for this information |

### **Revel Guard**

| **Originating Device / Service** | **Port/Protocol** | **URL** |
| --- | --- | --- |
| Communications and data collection for site statistics | 443 | \*.my-canopy.com leaf-swu.gocanopy.io  s3.us-east-1.amazonaws.com  revelguard.s3.amazonaws.com |
| Monitoring and device access | 8000 | mon001.rg.revelup.com |

### **Meraki Network Management**

| **Originating Device / Service** | **Port/Protocol** | **URL** |
| --- | --- | --- |
| Meraki backend | 7351 | 108.161.147.0/24  199.231.78.0/24  64.62.142.12/32  209.206.48.0/20  216.157.128.0/20  158.115.128.0/19 |

### **Ingenico Estate Management**

| **Originating Device / Service** | **Port/Protocol** | **URL** |
| --- | --- | --- |
| Layer 3 | 7003 | temterminalsnar07.icloud.ingenico.com  35.194.82.25 |
| Layer 7 | allow Peer-to-Peer Webthunder | |

### **MicroTouch KDS MDM**

| **Port** | **Inbound/Outbound** | **URL** |
| --- | --- | --- |
| 443 | Outbound | | play.google.com | | --- | | \*.googleapis.com | | m.google.com | | accounts.google.com | | 172.217.16.0/24 | | 216.58.209.0/24 | | 142.251.1.0/24 | | 173.194.220.0/24 | | 142.250.186.0/32 | | 142.250.0.0/16 | | 216.239.32.0/19 | | 74.125.193.0/24 | | 195.12.177.0/24 | | 216.58.192.0/19 | |
| 5228, 5229,5230 | Outbound | | mtalk.google.com | | --- | | mtalk4.google.com | | mtalk-staging.google.com | | mtalk-dev.google.com | | alt1-mtalk.google.com | | alt2-mtalk.google.com | | alt3-mtalk.google.com | | alt4-mtalk.google.com | | alt5-mtalk.google.com | | alt6-mtalk.google.com | | alt7-mtalk.google.com | | alt8-mtalk.google.com | | android.clients.google.com | | device-provisioning.googleapis.com | |

### **Management of Apple on Enterprise Networks**

#### **Device Setup:**

| **Description** | **Ports** | **Hosts** | **Protocol** |
| --- | --- | --- | --- |
| Device activation | 443 | albert.apple.com | TCP |
| Internet connectivity validation for networks that use captive portals | 443, 80 | captive.apple.com | TCP |
| eSIM activation | 443 | sq-device.apple.com | TCP |
| Used by devices to set their date and time | 123 | time-ios.apple.com | UDP |
| Used by devices to set their date and time | 123 | time.apple.com | UDP |

#### **Device management:**

| **Description** | **Ports** | **Hosts** | **Protocol** |
| --- | --- | --- | --- |
| Push notifications | 443, 80, 5223, 2197 | \*.push.apple.com | TCP |
| DEP provisional enrollment | 443 | deviceenrollment.apple.com | TCP |
| Used by an MDM server to identify which software updates are available to devices that use managed software updates | 443 | gdmf.apple.com | TCP |
| APNs certificate request portal | 443 | identity.apple.com | TCP |
| Hosts enrollment profiles used when devices enroll in Apple School Manager or Apple Business Manager through Device Enrollment | 443 | iprofiles.apple.com | TCP |
| MDM servers to upload enrollment profiles used by clients enrolling through Device Enrollment in Apple School Manager or Apple Business Manager, and to look up devices and accounts | 443 | mdmenrollment.apple.com | TCP |
| Required to log in with a Managed Apple ID on Shared iPad | 443 | setup.icloud.com | TCP |

#### **Apple Business Essentials device management:**

| **Description** | **Ports** | **Hosts** | **Protocol** |
| --- | --- | --- | --- |
| DEP enrollment server | 443 | axm-adm-enroll.apple.com | TCP |
| MDM server | 443 | axm-adm-mdm.apple.com | TCP |
| SCEP server | 443 | axm-adm-scep.apple.com | TCP |
| View and manage apps and devices | 443 | axm-app.apple.com | TCP |
| View the location of devices in Managed Lost Mode | 443 | \*.apple-mapkit.com | TCP |

#### **Software updates:**

| **Description** | **Ports** | **Hosts** | **Protocol** |
| --- | --- | --- | --- |
| iOS, iPadOS, and watchOS updates | 80 | appldnld.apple.com | TCP |
| Rosetta 2 updates | 443 | configuration.apple.com | TCP |
| Software update catalog | 443 | gdmf.apple.com | TCP |
| iOS, iPadOS, tvOS, watchOS, and macOS updates | 443, 80 | gg.apple.com | TCP |
| iOS, iPadOS, tvOS, watchOS, and macOS updates | 443, 80 | gs.apple.com | TCP |
| Hosts software update catalogs | 443, 80 | mesu.apple.com | TCP |
| Software update downloads | 80 | updates-http.cdn-apple.com | TCP |
| Software update downloads | 443 | updates.cdn-apple.com | TCP |

#### **App Store:**

| **Description** | **Ports** | **Hosts** | **Protocol** |
| --- | --- | --- | --- |
| Store content such as apps, books, and music | 443, 80 | \*.itunes.apple.com | TCP |
| Store content such as apps, books, and music | 443 | \*.apps.apple.com | TCP |
| Store content such as apps, books, and music | 443 | \*.mzstatic.com | TCP |
| Enterprise App validation | 443 | ppq.apple.com | TCP |

#### **Certificate validation:**

| **Description** | **Ports** | **Hosts** | **Protocol** |
| --- | --- | --- | --- |
| Certificate validation | 80, 443 | certs.apple.com | TCP |
| Certificate validation | 80 | crl.apple.com | TCP |
| Certificate validation | 80 | crl.entrust.net | TCP |
| Certificate validation | 80 | crl3.digicert.com | TCP |
| Certificate validation | 80 | crl4.digicert.com | TCP |
| Certificate validation | 80 | ocsp.apple.com | TCP |
| Certificate validation in China | 80 | ocsp.digicert.cn | TCP |
| Certificate validation | 80 | ocsp.digicert.com | TCP |
| Certificate validation | 80 | ocsp.entrust.net | TCP |
| Certificate validation | 443 | ocsp2.apple.com | TCP |
| Certificate validation | 443 | valid.apple.com | TCP |