

YahClick(BCS) Service Partner

Business Operational Training YahClick Service Review

Agenda



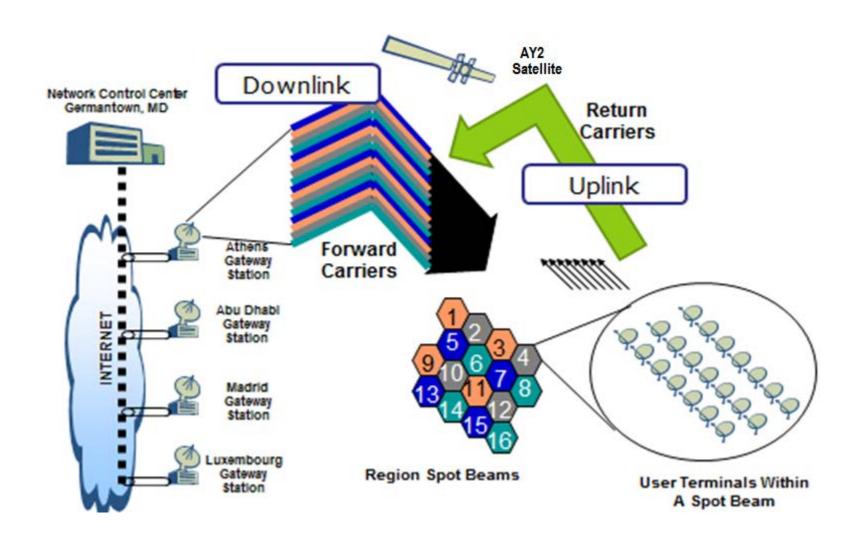
- Review the satellite-based Internet service
 - Uplink/downlink and capacity
 - Spot beam architecture and coverage
 - Satellite connection
- Satellite internet characteristics
 - Internet data optimizations
 - Effect of weather
 - Fair Access Policy (FAP)
- Overview of YahClick Service plan structure, Portals and key system process
- YahClick Portals and System Processes
- User Roles
- Processes
- Effect of Weather



Review the satellite-based Internet service

YahClick System Architect Uplink and YahClick Downlink

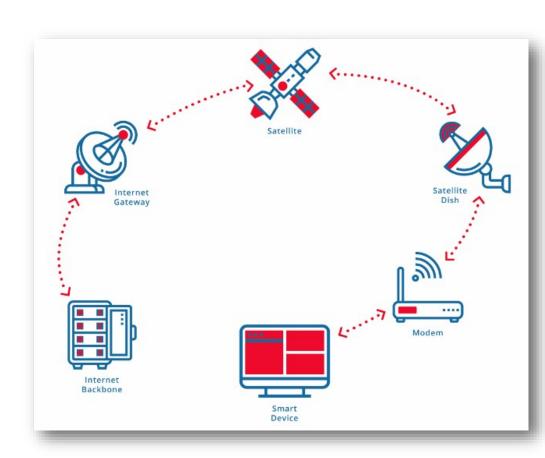




SATELLITE CONNECTION | How it Works?



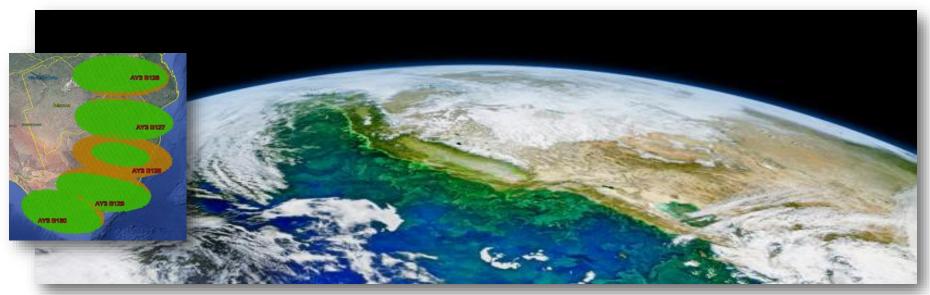
- Satellite Internet Solution works as follows:
- When accessing the Internet and entering a site, one signal is sent to the satellite through the modem and antenna installed in the home.
- Upon receiving this signal, the satellite transmits the signal to the Gateway Network Operations Centre (GNOC). The (GNOC) gateway provides access to the internet.
- The GNOC establishes the connection and returns the signal to the computer, displaying the site information requested from the satellite.



SATELLITE BEAM COVERAGE



- Satellite signals are beamed down to earth and cover an area which is called the satellite footprint.
- The site of the area is determined by the size of the Satellite dish, because when signals of typical frequency are sent to earth the Satellite produces a diffraction pattern (a spread of waves) and the angle of the spread determines the area of the footprint.



https://www.freepik.com/free-photo/satellite-image-earth-original-from-nasa-digitally-enhanced-by-rawpixel-free-image-by-rawpix_3218214.htm#page=2&query=satellite&position=37

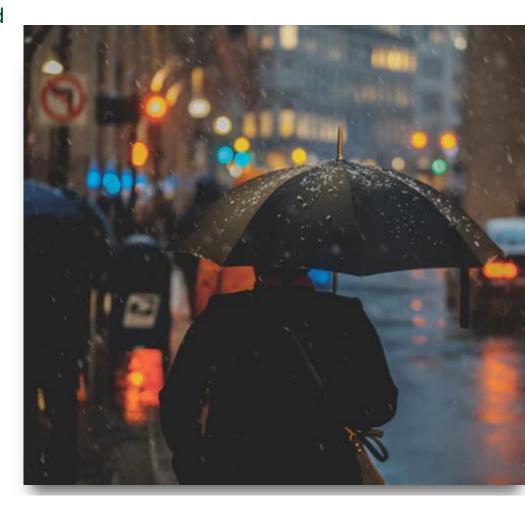


Satellite internet characteristics

THE EFFECTS OF | Weather



- Let's take a look at how rain, sun and frequency bands could affect the operations of
 Satellite.
- The service is designed to cope with most weather conditions, including wind speeds of up to 100mph.
- Puring periods of extremely heavy rain or snow, the radio signals may become reduced but mechanisms are in place to mitigate this.



Weather - Rain Fade



- Rain Fade is the physical phenomenon that deteriorates RF signals due to the presence of moisture (rain, snow, ice) in the transmission path
- Losses are especially prevalent at higher frequencies like Ka-band (AY2 is a Ka-band satellite)
- Rain fade can be caused by precipitation at the uplink or downlink location. However, it does not need to be raining at a location for it to be affected by rain fade, as the signal may pass through precipitation many miles away
- Signal loss can occur due to presence of precipitation on the antenna assembly as well
- HN system has mechanisms built in to minimize the effect of rain fade on service known as Adaptive Coding and Modulation (ACM) and Adaptive Inbound Selection (AIS)

THE EFFECTS OF WEATHER | Sun Outage



- Sun outage usually occur briefly twice a year when the sun crosses the equatorial plane.
- The interference happens when the sun comes into direct contact with a Satellite and the suns

Receiving Antenna

radiation overpowers the signal.

Satellite

- This can cause a loss in signal or a fuzzy, pixilated or frozen quality on a screen. Sometimes, a Satellite modern may need to be rebooted after the outage to restore services.
- The effect sweeps from north to south from approximately 20 February to 20 April, and from south to north from approximately 20 August to 20 October.
- It affects all satellites and cable providers and their customers but the good news is that it the effects are for less than 12 minutes a day for a few consecutive days.



YahClick Portals and System Processes

Service Partner System Access and IT work Items



System WEB interfaces provided:

- Partner Portal (Ordering, Provisioning, Customer Care & Billing)
- Installation Portal
- End-user Portal

IT work items for Service Partner:

- Ensuring adequate bandwidth with internet connection for WEB interfaces
- Ordering API Optional (Full API implementation not required)
- FAP Token API Optional
- Case Management
- Processing Bill Detail File Required (can allow SP to process end-user bill detail)

Service Partner Functions



Service Partner Portal Functions

- Order management
- Installer Portal
- Installation management
- Customer care
 - Case management
 - Service suspension/activation
- Invoice management
- Business Intelligence
- User Account Management
- View Knowledge Base
- Verification tools
 - OVT
 - SDT
 - SHP
 - JUDD

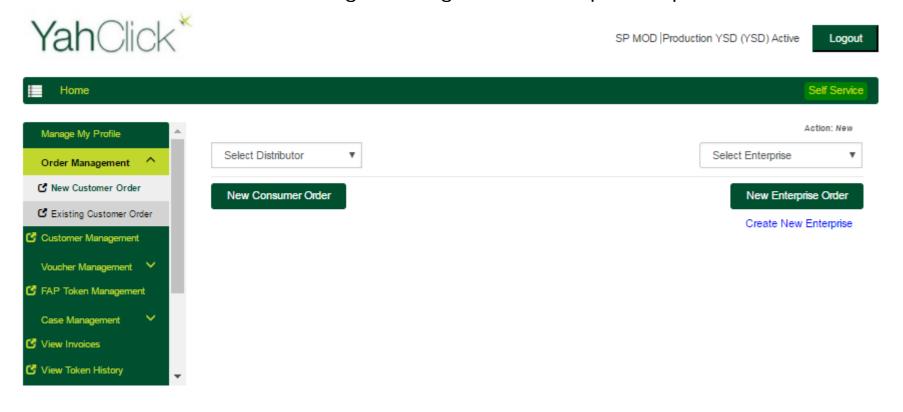
End-User Portal

- Self-care portal
 - Check Usage
 - Redeem Token if Available
 - Run SpeedTest
 - View Knowledge Base



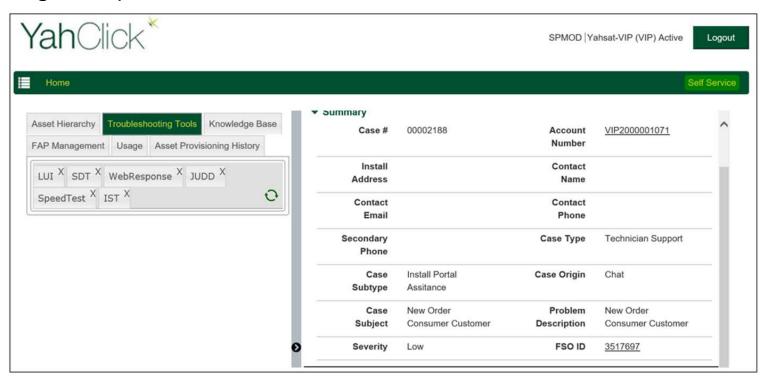
Partner Portal – Order Management

- This portal is for customer care and case management. This tool is only used by the Service Partner customer care agent and Manager on Duty (MOD).
- Places new orders and manages changes to orders pre- or post- installation



Partner Portal – Case Management Yah

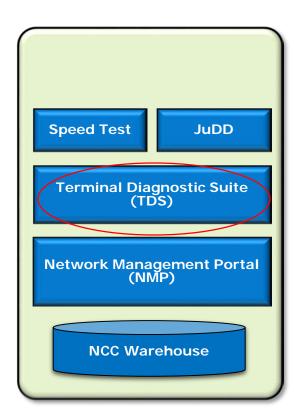
- Yah Click
- This portal is for customer care and case management. This tool is only used by the Service Partner customer care agent and Manager on Duty (MOD).
- Provides the case management and troubleshooting functions for customer support
- Integrated with the various tools (part of NCC) to allow Customer Service Representatives (CSRs) to troubleshoot technical problems.
- Integrated case escalations/de-escalations.
- Manages suspension/reactivation of sites.



Terminal Diagnostic Suite (TDS)



- This suite provides tools for installers and CSR to verify site performance and troubleshoot reported site issues
 - The Onsite Verification Tool (OVT) is integrated with the installer portal and gives the installers a Pass/Fail check for install quality by interfacing with NOC and terminals (over the air)
 - The Site Diagnostic Tool (SDT) is accessible from the partner portal and gives the CSRs ability to verify that an active site (after installation and activation) is receiving and transmitting properly
 - The Site History Profiler (SHP) is linked from the Installer Portal and the partner portal. It provides the installers and CSRs a past 90-day terminal performance (input and output data rate and volume) profile



Customer Portal



- There is no login needed for self-care portal
 - Instead users enter the SAN and ESN Number.
- There are three operations available to end users from the self-care portal
 - Check usage
 - Uplink and downlink data consumption from the site
 - Apply restore tokens
 - Activate a token purchased to get out of the restrictive upload and download speeds when user quota exceeds the allowance
 - System performance test
 - Verify the uplink and downlink data rates a user terminal is delivering at the time of execution as measured against the purchased service plan
 - Must be executed from a PC connected to the terminal
 - Help files
 - Knowledge Base and FAQs tab will provide necessary information to help end user to perform troubleshooting steps.

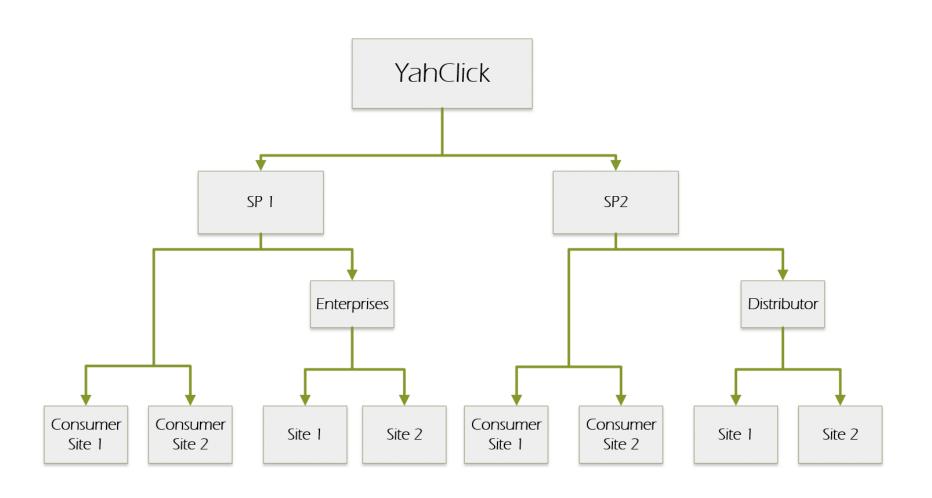




Account Hierarchy

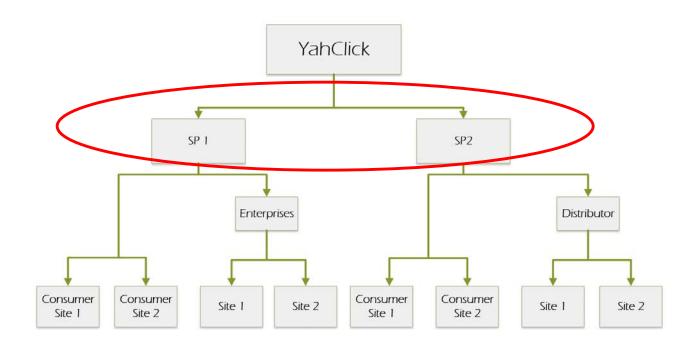
Account Hierarchy





Customer and Account Hierarchy: Service Partner (SP)

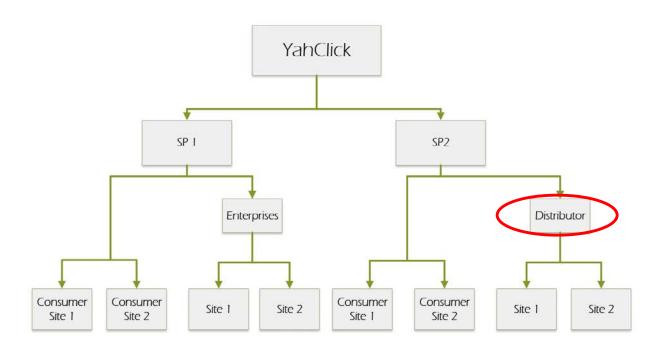




- Service Partners (SPs)
 - This is the next level in the hierarchy under YahClick
 - There can be many SPs, and they may sell same, similar, or entirely different packages in the system
 - Each SP has a contract in the system for its "Consumer" end users and another for its "Enterprise" customers, based on the agreement between YahClick(BCS) and SP

Customer and Account Hierarchy: Distributors



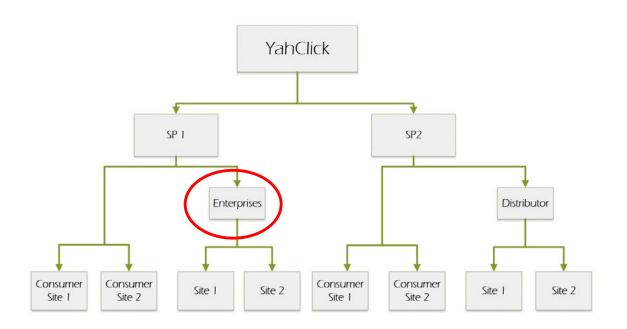


Distributors

This is the level in the hierarchy under SPs
There can be many Distributors, and they may sell same, similar, or
entirely different packages in the system.

Customer and Account Hierarchy: Customer



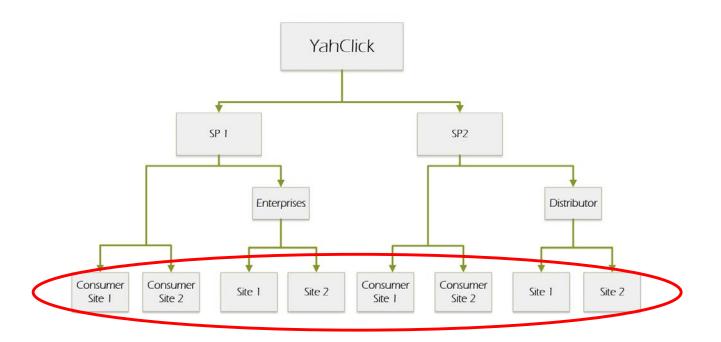


Customer

- These are the end users who buy services from SP
- Customers are always owned and managed by the SP
- They can be of two kinds
 - Consumers
 - **Enterprises**
- Consumers typically have one or a few sites and are home users
- Consumers are represented in the system by their individual site, i.e., there is no explicit account in the systems for consumers (it is always tied to the site)
- Enterprises typically have multiple sites

Customer and Account Hierarchy: Site





Sites

- These are the individual remote terminals owned by either Consumers or Enterprises
- Each terminal is identified by a unique identifier called Site Account Number (SAN)
- Each terminal is also associated with a complete set of hardware (IDU, ODU, and antenna) identified by the IDU ESN

Technical Operations



YahClick Network Operations Center (YNOC)

Level / Tier	Support Functions	Entity
1	Helpdesk / Operations	Service Partners
2	Technical / Operations	UAE & India (YNOC)
3	Technical / Operations	YNOC & USA
3 & 4	Operations / Engineering	USA

Escalation Path



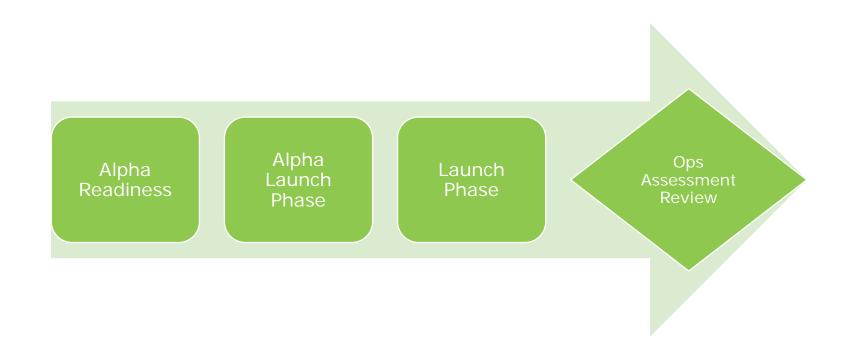
• Service Delivery Calls – weekly, fortnight, monthly or ad-hoc

Operational Announcements & Notifications

• MOD & Support email group -ID

YahClick Launch Process for Service YahC Partner







Alpha Readiness

Alpha Launch Phase

Launch Phase

Ops Assessmen Review

Alpha Readiness

- Business and Operational leaders/POCs identified
- •Business and Operational processes & policies are defined
- Business and Operational systems and resources are identified/ready for production
- •BOT and TTT training completed = Alpha and Launch Project Plan finalized
- Launch phases' objectives understood and expectation targets established

Alpha Phase

- •Apply/Confirm operational and system processes
- Perform initial non-customer installations Check all operational processes and scenarios – complete Alpha Phase Checklist
- All Launch readiness training completed
- •Launch targets and performance metrics finalized

Launch Phase

- •Customer Accounts begin: 1st Billable customer allowed
- •Billing begins for all activated sites;
- •Billing/Invoicing processes completed and 1st payment confirmed
- All operational processes and performance metrics tested and measured;
- •Launch Phase Checklist completed
- •Initial Launch Target installations completed
- •Quality of operations and adherence of processes measured and improvement areas addressed

60 - 90 days
Ops Assessment
Review



User Roles

Processes

Service Partner User Types (Roles)



Admin

- Administers the accounts of all other users
- · Has access to all SP data
- Has access to functions of all other users

Ordering Agent Consumer/Enterprise

 Places new orders and manages changes to orders pre- or postinstallation

Installation Manager

- Onboard installers and upload their certifications
- Use the FSOs in installer portal to schedule and manage installation
- · Review install quality

Installer

- SLVT for Lat/Long update & verification and SHP for field repair
- · Has access to install reference sheet
- Run installation verification process

MOD

- · Manages trouble tickets (cases) Remote Site
- · Uses the site record and tools to troubleshoot technical issues
- · Places new orders and manages changes to orders pre- or post- installation
- MOD Level escalates tickets to YahClick
- · Places new orders and manages changes to orders pre- or post- installation
- Uses the site record and tools to troubleshoot technical issues

Billing Admin

- Obtains detailed site charges (YahClick to SP) per site
- Manages the FAP token account on behalf of SP with YahClick
- Manages lock/unlock of sites for non-payments

List of Key System Processes



