Personalization Platform Workflows



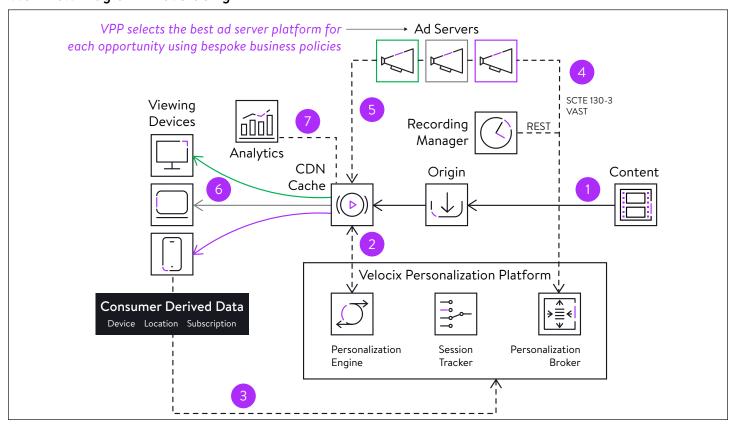
Velocix Personalization Platform (VPP) provides a mechanism for dynamically manipulating individual video streams delivered by a CDN, in accordance with operator defined business rules. VPP is frequently used to introduce addressable video advertising, apply conditional bandwidth controls to CDN traffic, or enforce compliance with content rights or other legal obligations. In each usage scenario, Velocix software coordinates with other ecosystem components to appropriately modify streams in real-time. The specific workflows associated with common usage scenarios are as follows:

Addressable Advertising

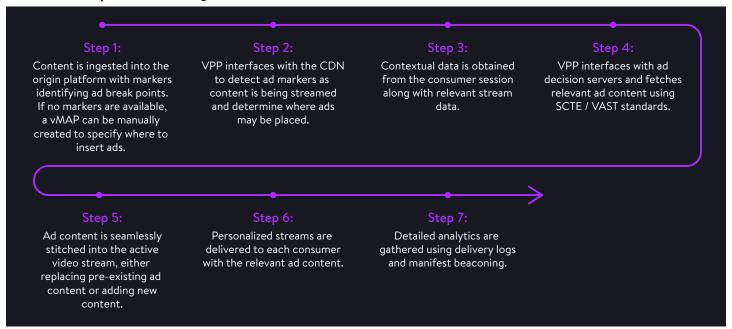
Velocix Personalization Platform enables addressable advertisements to be inserted into active video streams. VPP is deployed as a scalable software module that integrates with CDN and ad serving platforms to determine when ad insertion or ad replacement opportunities exist and what advertisements to insert into each stream based on consumer derived data and contextual information.

<u>Use case</u>	Description
Live & Near Live	Dynamically replace ads in live broadcast feeds according to defined rules
Cloud DVR / TSTV	Replace stale advertisements in time shifted content with more relevant ones
Video On Demand	Insert pre-, post-, and mid-roll advertisements into VOD streams

Workflow Diagram - Advertising



Workflow Steps - Advertising

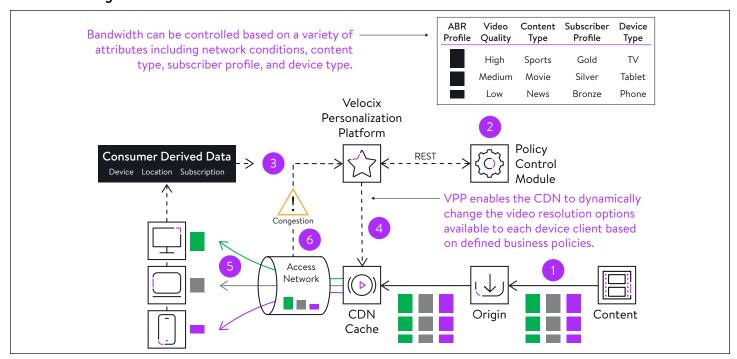


Bandwidth Controls

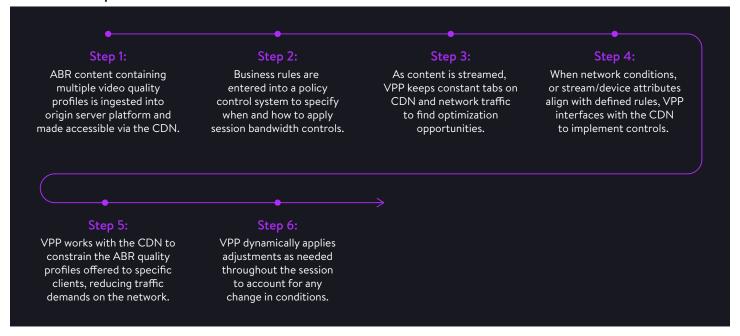
Velocix Personalization Platform enables bandwidth controls to be applied to active video streams to proactively manage network constraints and improve the quality of experience for consumers. The VPP solution integrates with CDN and policy control platforms to determine when and how to apply controls to individual sessions.

Use case	Description
Reduce Congestion	Dynamically adjust session bandwidth to ease network congestion based on set rules
Define Quality Tiers	Adjust video quality based on tier of service or consumer location (on/off-net)
Increase Quality	Actively mitigate greedy clients, improving video performance for all users
Improve Margins	Apply constraints to reduce the cost per stream and support more users on the network

Workflow Diagram - Bandwidth Controls



Workflow Steps - Bandwidth Controls

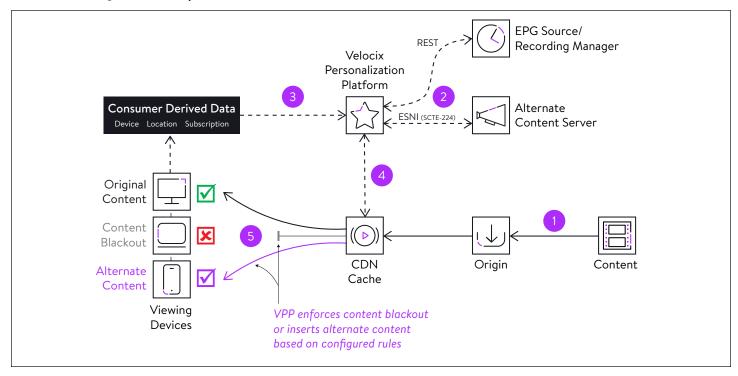


Compliance Enforcement

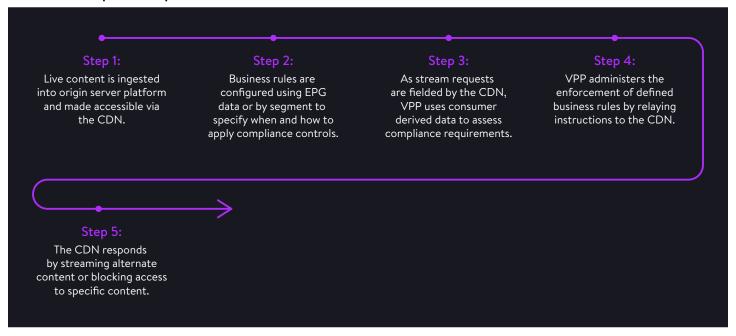
Obtaining a license to stream premium live content generally means agreeing to control access to that content under certain conditions. To maintain compliance with negotiated content rights agreements and local regulations, Velocix Personalization Platform can restrict access to content based on consumer derived data, including consumer location, network access, subscriber profile, and device. When restrictions apply, VPP can replace original content with alternative programming or can prohibit viewing entirely.

Use caseDescriptionContent BlackoutConsumer access to content is fully restricted under specific conditionsAlternate ContentConsumers are presented alternate content under specific conditions

Workflow Diagram - Compliance Enforcement



Workflow Steps - Compliance Enforcement



In Summary

With its ability to dynamically adjust individual video streams based on configurable business rules, the Velocix Personalization Platform gives operators the flexibility to support a diverse set of business needs. When used in concert with a content delivery network, such as the Velocix CDN, VPP powers a more personalized viewing experience that deepens consumer engagement, drives up ad revenues, and produces a better quality of experience for consumers, on every screen.

Contact a Velocix salesperson to learn more.

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