



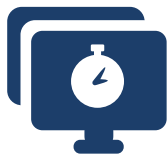
**AirSembly™**

# AirSembly Data Sheet

**airVM®**  
Unlock the Cloud™

# The **AirSembly**<sup>™</sup> Cloud Management Platform

**AirSembly has 3 core components:** a marketplace storefront, billing & chargeback, and automation & provisioning – all supporting multi-tier cloud distribution. Combined, these features enable you to quickly bring your cloud services to market through any type of distribution model.



## Automation & Provisioning

Integrate your cloud services into your existing workflows, and track and report sales information at all levels in the sales channel. Provisioning is fully automated and additional products can be manually provisioned.



## Marketplace Storefront

Customize and brand your cloud product catalogue for any service, at any interval, for both private and public clouds, and also for individual sales channels and customers.



## Billing & Chargeback

The AirSembly platform supports chargeback and billing capability. Automated metering, billing and invoicing is available for each level in the distribution channel, for all types of cloud services. The platform also supports pre-paid billing with credit cards.

  
Automation &  
Provisioning



  
Marketplace  
Storefront

 Billing &  
Chargeback

<p><b>Product Management</b></p>	<ul style="list-style-type: none"> <li>• Manage a catalog of product items</li> <li>• Custom product creation</li> <li>• Ability to set and turn on/off product pricing</li> <li>• Ability to prioritize display order of products</li> <li>• Ability to tag/prioritize products</li> <li>• Searchable marketplace for customers</li> <li>• Ability to make private products for specific customers</li> <li>• Organize product catalogs by data center</li> <li>• Product discounts for specific customers</li> </ul>
<p><b>White-label/Branding</b></p>	<ul style="list-style-type: none"> <li>• Ability to change logos</li> <li>• Ability to change CSS and use preferred color and font schemes</li> <li>• Ability to change headers and footers</li> </ul>
<p><b>Multi-language support</b></p>	<ul style="list-style-type: none"> <li>• Supports preferred language and time zones for users</li> </ul>
<p><b>Payment options</b></p>	<ul style="list-style-type: none"> <li>• Pre-paid credit card processing</li> <li>• Post-paid invoicing</li> </ul>
<p><b>Sales quotations</b></p>	<ul style="list-style-type: none"> <li>• Ability to save cart as a quote</li> <li>• Ability to save quotes as PDF</li> <li>• Ability to email quotes to customers</li> </ul>
<p><b>Display</b></p>	<ul style="list-style-type: none"> <li>• Ability to turn pricing on/off for customers</li> <li>• Turn on/off web signup access</li> <li>• Set the decimal marker (comma or decimal)</li> </ul>
<p><b>Billing</b></p>	<ul style="list-style-type: none"> <li>• Order history</li> <li>• Full billing &amp; invoice support</li> <li>• Support for contracts with expiry terms (minimum charges, flat fee, usage based)</li> <li>• Supports multiple payment methods</li> <li>• Supports multiple payment gateways</li> </ul>
<p><b>Roles Based Access Control (RBAC)</b></p>	<ul style="list-style-type: none"> <li>• Each feature supports full CRUD access levels that are customizable by role</li> <li>• Over 500 points of customization can be toggled</li> <li>• 5 default roles can be completely customized by feature</li> </ul>
<p><b>Cloud Brokerage</b></p>	<ul style="list-style-type: none"> <li>• Allow channel partners the ability to support and resell vCloud Air public cloud including billing, invoicing and a white-labelled marketplace</li> </ul>
<p><b>Intuitive interface</b></p>	<ul style="list-style-type: none"> <li>• Responsive and device agnostic using HTML5</li> </ul>



<p><b>vCloud Director user features</b></p>	<p><b>vDC</b></p> <ul style="list-style-type: none"> <li>• Deploy/remove/rename</li> <li>• Display usage metrics &amp; reporting</li> </ul> <p><b>vApp</b></p> <ul style="list-style-type: none"> <li>• Deploy/remove/clone/start/stop/restart/rename</li> <li>• Support deploying with multiple tiers of storage</li> <li>• Create/revert/delete snapshots</li> </ul> <p><b>VM</b></p> <ul style="list-style-type: none"> <li>• Start/stop/restart/reconfigure/deploy/remove/clone</li> <li>• Console access</li> <li>• VM specific metrics</li> </ul> <p><b>Overall</b></p> <ul style="list-style-type: none"> <li>• Deploy/remove a network to a vDC</li> <li>• Deploy/remove a vApp network</li> <li>• Add a VM to a vApp network</li> <li>• Deploy/remove a firewall rules &amp; NAT rules</li> <li>• Convert a vApp to a vApp template</li> <li>• Upload/deploy from a vApp template</li> <li>• Customize hostname of the VM, name of the VM</li> <li>• Manage IP allocations/IPs</li> <li>• Import a VM into a vApp from existing vApp template, vCenter or ISO</li> </ul>
<p><b>vCenter user features</b></p>	<ul style="list-style-type: none"> <li>• Deploy, remove, clone, reconfigure, start, stop, restart VMs</li> <li>• Create, revert, remove snapshots</li> <li>• VM console access</li> <li>• Ability to group VMs and perform group actions such as start, stop, restart, delete</li> <li>• Schedule VM actions for one-time or recurring tasks</li> <li>• Add/remove vNICs to VMs</li> <li>• Add additional networks</li> <li>• Edge functionality: deploy, remove, manage firewall rules, NAT rules, IPSec VPN, SSL VPN, services, addresses</li> </ul>
<p><b>vCloud Air user features</b></p>	<ul style="list-style-type: none"> <li>• Full feature parity with vCA for edges (creation, updating, removal of firewall and NAT rules)</li> <li>• Manage all virtual data centers and plan instances</li> <li>• User access control to service instances using RBAC</li> <li>• Manage/reconfigure vCA plans</li> </ul>
<p><b>XaaS user features</b></p>	<ul style="list-style-type: none"> <li>• Ability to order/reconfigure XaaS products</li> <li>• Bundled with VMware products</li> </ul>

  
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<b>Showback</b>	<ul style="list-style-type: none"> <li>• Display of resource usage</li> <li>• Historic usage graphs &amp; tables</li> <li>• Monthly roll-ups at the customer level</li> </ul>
<b>Chargeback</b>	<ul style="list-style-type: none"> <li>• Customers can view pricing per resource</li> <li>• Platform billing with multiple payment gateways</li> </ul>
<b>Billing reports</b>	<ul style="list-style-type: none"> <li>• Billing records for revenue tracking, usage, credit card payments and profitability based on resource consumption</li> <li>• Reports can be broken down to display individual customer usage/consumption</li> </ul>
<b>Cost Profiles</b>	<ul style="list-style-type: none"> <li>• Ability to associate pricing and costs to resources for margin analysis</li> </ul>
<b>Flexible payment options</b>	<ul style="list-style-type: none"> <li>• Prepay (credit card)</li> <li>• Postpay (invoicing)</li> </ul>
<b>BSS integration</b>	<ul style="list-style-type: none"> <li>• Process support for product creation, contract creation, billing engine, product pricing, discounts &amp; markups, invoicing &amp; quoting</li> </ul>
<b>OSS integration</b>	<ul style="list-style-type: none"> <li>• Full automation with vSphere/vCD/vCA including a job/task manager queue system to handle both concurrent and scheduled platform operations</li> </ul>



<b>VMware vCloud Air Network</b>	<ul style="list-style-type: none"> <li>• vCenter</li> <li>• vCloud Networking and Security (vCNS)</li> <li>• vCloud Director</li> <li>• vCloud Air</li> </ul>
<b>Operations Management</b>	<ul style="list-style-type: none"> <li>• Built in metrics</li> <li>• Resource usage for VM, vDC and XaaS products</li> <li>• Customer specific consumption metrics</li> <li>• VM/vDC resource allocation reports (monthly/hourly)</li> </ul>
<b>Infrastructure Management</b>	<ul style="list-style-type: none"> <li>• Ability to manage VM/vCDs/vCA</li> <li>• Provider can manage clusters, data stores, ip allocations, networks, routers, hosts, templates, vShield edges, users, RBAC</li> </ul>
<b>Hypervisor Support</b>	<ul style="list-style-type: none"> <li>• VMware vCenter, vCloud Director, vCloud Air</li> </ul>
<b>Provider Single Pane of Glass</b>	<ul style="list-style-type: none"> <li>• vSphere</li> <li>• vCD</li> <li>• vCA</li> </ul>
<b>vCD</b>	<ul style="list-style-type: none"> <li>• Full support of vCD-SP structure</li> <li>• Full synchronization with RabbitMQ message bus</li> <li>• Support for all billing types: PAYG, Reservation, Allocation</li> <li>• Support of API only features including:             <ul style="list-style-type: none"> <li>• Virtual machine metrics</li> <li>• VM disk level storage profiles</li> <li>• NSX support through compatibility mode for vShield edges</li> </ul> </li> </ul>
<b>vCloud Air service</b>	<ul style="list-style-type: none"> <li>• Ability to pull in multiple locations allowing customers to start reselling vCA resources with a single synchronization</li> <li>• Full support of vCA structures</li> </ul>
<b>Performance &amp; Scalability</b>	<ul style="list-style-type: none"> <li>• Platform supports multiple installations of vSphere, vCD, vCA across different data centers through a fully managed provider portal</li> </ul>
<b>XaaS Products</b>	<ul style="list-style-type: none"> <li>• Platform supports "Anything-as-a-Service"</li> <li>• XaaS products can be stand-alone or bundled with VM products</li> <li>• Shipping options include physical or digital allowing providers the ability to customize their products</li> </ul>
<b>VMware synchronization</b>	<ul style="list-style-type: none"> <li>• For vCenter,vCD,vCA the platform will sync data at the provider object level to include hosts, datacenters, data stores, clusters, networks, etc.</li> <li>• The platform will pull in organizations, users, networks, network pools, IP allocations, storage profiles, vDCs, vApps, VMs, edges, NAT rules, firewall rules</li> </ul>



# Platform

<b>Multi-tier Cloud Distribution</b>	<ul style="list-style-type: none"> <li>• Direct Sales</li> <li>• Indirect Sales</li> <li>• 2 Tier channels</li> <li>• Sales Agents</li> </ul>
<b>User Security</b>	<ul style="list-style-type: none"> <li>• 2 factor email authentication which can be toggled on/off</li> </ul>
<b>Multi-tenancy</b>	<ul style="list-style-type: none"> <li>• Full secure multi-tenancy for up to 3 layers of reselling</li> <li>• Customer information is segregated to their own resources and do not have visibility to other customer's information, resources or pricing</li> </ul>
<b>Reporting</b>	<ul style="list-style-type: none"> <li>• Usage consumption reports and billing information available hourly/monthly</li> <li>• View customer usage of resources</li> </ul>
<b>Service integration</b>	<ul style="list-style-type: none"> <li>• The AirSemblly API has 1:1 parity with the functionality of the interface</li> </ul>
<b>Portals</b>	<ul style="list-style-type: none"> <li>• Control which portal modules are activated</li> </ul>
<b>Display customization</b>	<ul style="list-style-type: none"> <li>• Ability to toggle visibility and private use of resources (data center, templates, products, provider vDCs, networks, organizations)</li> </ul>
<b>Reseller functionality</b>	<ul style="list-style-type: none"> <li>• Ability to white label storefront</li> <li>• Pricing/mark-ups by specific customers</li> </ul>
<b>VMware vCloud Air Network</b>	<ul style="list-style-type: none"> <li>• vSphere</li> <li>• vCloud Director</li> <li>• vCloud Air</li> </ul>
<b>APIs</b>	<ul style="list-style-type: none"> <li>• Full RESTful API support</li> <li>• Full feature parity with the interface</li> <li>• Full north bound APIs for consumption</li> <li>• DevOps integration can add/customize features and develop additional 3rd party compatibility</li> </ul>
<b>Availability</b>	<ul style="list-style-type: none"> <li>• Platform leverages high availability VMware mechanisms</li> </ul>
<b>Performance &amp; scalability</b>	<ul style="list-style-type: none"> <li>• Can be provisioned in stand-alone (discrete) or distributed (highly-scalable) configurations</li> </ul>
<b>Recoverability</b>	<ul style="list-style-type: none"> <li>• Platform supports backup and recovery techniques with VMware virtualization tools and open LAMP environments</li> </ul>