

IT as a Service Provider



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IT Departments within an organization are traditionally seen as cost centers; as a necessary cost of doing business.

The IT department manages the basic compute infrastructure and other software applications which are all critical to running the business on behalf of all other interdepartmental consumers. But they are classified as 'cost centers' because no revenue can be directly attributed to their services.

This is on top of expecting the IT to compete with cloud-based vendors who offer 'Everything as a Service'.

It doesn't have to be this way if the IT Organization acts more like a 3rd Party Service Provider themselves. They can do this by using the same tools used by leading cloud service providers. The most important tool is the 'Control Panel' to delegate self-service controls. This product abstract away all the technology and its implementation and offers 'everything' as a service. This could be barebone compute infrastructure or some other resources in other software applications.

An important part of offering as a service is to provide 'self-serve portals' where the control is delegated to the last possible tier of users. All possible actions are scripted and offered as GUI menus which the end users can use to serve themselves without engaging an IT teams.

Reasons to engage the IT departments

IT owns security credentials and access to all systems

The most common reason for end-users to have to engage the IT is because the root or admin level access required to perform the action cannot be granted to the end-users requiring it.

This results in an internal protocol within the IT department where access credentials are stored and given to specific admin users to execute tasks and actions on behalf of the rest of the organization.

A Control Panel changes everything. The Control Panel stores all access credentials in its internal secure systems and offers a transactional API on top of those systems. The APIs realize all the possible actions that need to be performed.

Control also offers a user-friendly GUI on top of the APIs. GUI also includes a separate authentication and authorization layer that requires all users to Authenticate themselves.

Together, all this hides the security credentials from the access of everyone except the Control Panel itself and still enables all users to execute their required tasks using user friendly GUI menus or automated APIs.

Performing actions require technical skills possessed by the IT only

This is the problem where the underlying systems do offer the actions required by the end-users, but they require complex training and skills not available with all users. This requires the end-users to communicate the requirement to IT 'out of band' and the IT then uses its skills to execute the task or perform the action.

Not so with a Control Panel in place. With the Control Panel, the vendor typically codes all the possible 'actions' available on the underlying systems. While doing this, the vendor also follows the best practices mentioned by the technology company proving the systems.

E.g. in case of Hosting Controller, it has followed all the best practices in terms of security, performance, logging, auditability, scalability, high availability, etc. when write any scripts for any of the actions.

The 'Control Panel' Solution

Service Providers put in a tool called 'Control Panel' that enables them to offer any resource as a service.

It fundamentally involves the following major functions:

1. Order Management
2. Provisioning
3. Quota Management
4. Self-Serve Portals

Order Management

This function requires that all resources, their add-ons and other options are captured in a 'catalog' which is offered for subscription by their customers.

When an organization's internal IT department puts in the control panel, it goes through the necessary exercise of defining their product catalog.

In this step they enumerate all the resources that they offer and make them into product offerings and their add-ons which the end users can now subscribe.

All offerings mentioned in the catalog may also have a price tag attached to them. If it does, then it makes it possible to attribute a revenue generated by the IT department as well.

Provisioning

Provisioning is the automated task of settings all instances, their credentials and configurations in place to make them available automatically for the end-users to start using it immediately after the order is received.

The Control Panel comes with multiple application modules that provide all the required provisioning actions fully automated and scripted. For any applications not supported out of the box, Hosting Controller offers an application integration SDK which enables an IT department to add new applications and their provisioning into the control panel.

Quota Management

Quota Management is an integral part of the control panel which enables users to provide bounds on the amount of resources that can be provisioned through a hierarchy of levels.

In a commercial environment, the quotas can be purchased by paying in cash. Within an organization's private system, it could be allocated through an approval process. Hosting Controller enables the organization to define a hierarchy where higher-level quotas are allocated to higher levels in the organization's chart and then each level can delegate the quota further down. Before doing self-serve provisioning for any resource, the quotas are checked, and provisioning only proceeds when quota is available.

Self-Serve Portals

The IT department within an organization gets involved in running many day to day repetitive operations because of the lack of a central portal available for all end-users to self-serve themselves. Hosting Controller provides such a portal which serves as the face of the IT department for all control activity on all applications.

IT as a Profit Center

Hosting Controller allows a price tag to be attached to each resource offered by internal IT departments. This enables the organization to compare the price of offerings made by the internal team with other cloud based or third-party offerings. This establishes a proper cost for other departments and a revenue model for IT departments to be used for their profit center calculations.