Hosting Controller Inc.

Enterprise IT Departments

With and Without a ‘Control Panel’

Enterprise IT

With and Without a ‘Control Panel’

With a control panel in place, all normal users are provided with GUI based menus to conduct their control operations on the applications. The IT personnel also get more efficient as the Control Panel provides APIs for all control tasks and they can spend their time in automation using those APIs.

Origins of the Control Panel

'Control Panel' is the software that came around 20 years ago when different types of applications started to be offered as hosted services. It was the public face of the service providers who offered GUI based menus and dashboards to enable end-users to self-serve themselves for all possible use cases.

Control Panel offered free onboarding, sign ups, payment processing, automatic service provisioning, self-serve menus to order new services, upgrade / downgrade / cancel etc.

Fast forward 20 years, and now control panels are making their ways for internal usage of all types of organizations whether private enterprises or government bodies. This is based on the demand from other departments that their internal IT department should provide them 'Everything as a Service'.

Obsessed by the ease of use of the large public clouds like Amazon AWS, Microsoft Azure, Office 365, Google Cloud and others, the departments are expecting the same level of service for all the applications running in organization's private data centers and other on-premise locations.

The Requirement for Control Operations

Control Operations are any operations which are offered by applications to control the way they behave. This is separate from 'User Operations' which are ways applications offer their services to be used by end-users e.g. through web based interfaces or other specialized clients.

Control Operations for infrastructure and virtualization applications are to create virtual machines resize them, take snapshots etc.

Control Operations for other software applications like database servers would be to create new database, set their security permissions, resize them, backup and purge them etc.

Control Operations for email servers are to create new mail boxes, make them part of different groups and shared settings, resize their capacity, apply rules and purge them when not needed.

IT Operations Without a Control Panel

When there is no control panel, there is no unified interface for end-users to carry on their control operations on all applications. They are required to communicate their requirements to IT out-of-band through some means and the IT conducts them. The access to systems is also given to IT staff who are trained in all the common operations on the applications.

Figure 1: Without Control Panel

IT Operations With a Control Panel

With a control panel in place, all normal users are provided with GUI based menus to conduct their control operations on the applications.

The IT personnel also get more efficient as the Control Panel provides APIs for all control tasks and they can spend their time in automation using those APIs.

Figure 2: With Control Panel

Control Panel Other Benefits

Control Panel is also a single pane for all 'Control Actions'. Every user whether human user or machine user will be authenticated through credentials and then properly authorized to check if it is allowed to conduct the operation.

Since all actions are passing through the Control Panel, it also maintains an audit trail of every control action performed.

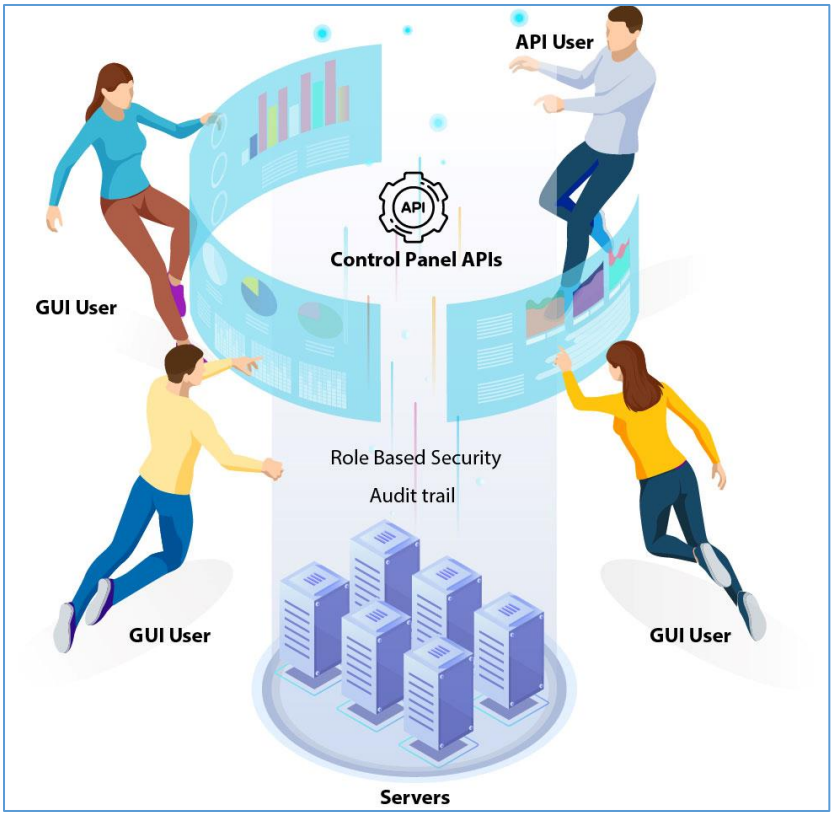

Figure 3: Control Panel Benefits

Integrations and Automation of the Full System

Control Panel provides north-bound APIs that enable other systems to invoke all actions programmatically. This is a powerful tool for creating workflows and automating other tasks as single transaction.

Control Panel provides SDKs for the IT and development team to integrate other systems and bring their control actions into the control panel. Once onboarded, those new applications also benefit from all the use-cases provided by the Control Panel.

Control Panels also send events to any external system enabling system architects to orchestrate their systems in a loosely coupled fashion and bring more integration into the systems.

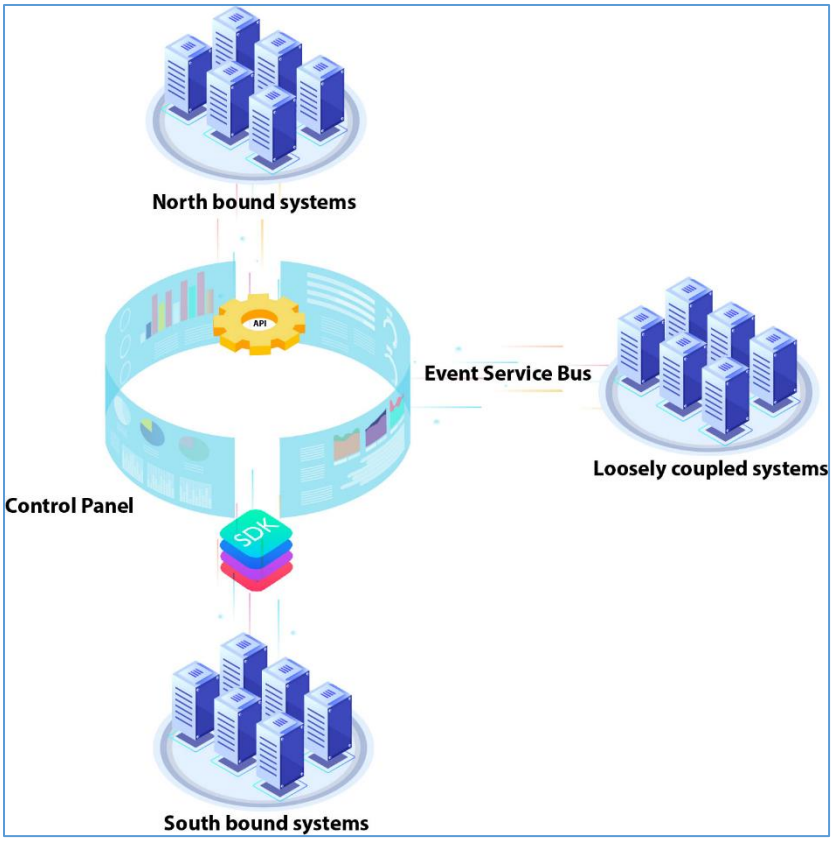

Figure 4: Automation of System

Evolved End-User Experience

End-Users find their experience much better not having to go through their IT departments. They are empowered by the self-serve menus that work on the click of a button and render results in seconds.

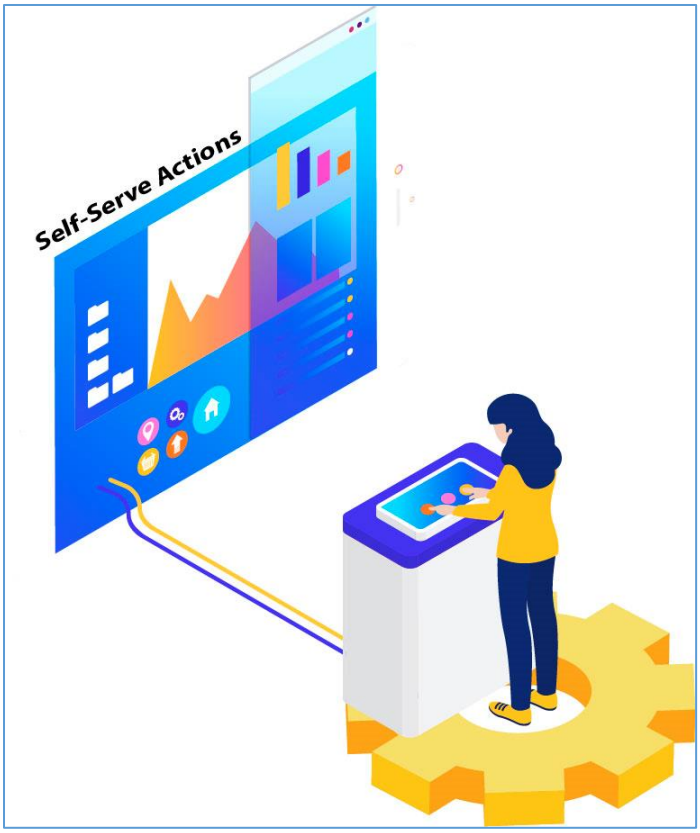

Figure 5: User Experience

IT Staff Evolves from Running Ops to DevOps

IT empowered by the API for all control actions, quickly evolves into DevOps and are freed from spending their time running Ops. This puts them in their natural place as 'developers' rather than staff running operations.

Figure 6: From Ops to DevOps

Concluding Remarks

Control Panels are standard and necessary element of all Service Providers. Recently they have been enabling internal IT departments of large enterprises and government organizations to offer 'Everything as a Service'. Hosting Controller is one of the leading control panels that has truly enabled many organizations to transform their IT departments into profit centers. It offers a large array of enterprise applications such as Microsoft Exchange, SharePoint, Skype for Business and many more to be offered "as a Service". To learn more about Hosting Controller Enterprise edition visit http://hostingcontroller.com/enterprise .