

# ServiceNow Activity Pack for EfficientIP SOLIDserver

## ServiceNow & EfficientIP Technology Alliance: Removing complexity to help accelerate service rollout

More and more, IT service groups are making use of IT Service Management (ITSM) solutions to action and track internal service requests and issues. Automation Tools are increasingly being used by ITSM editors, to allow customers to automate tasks to expose as services (catalogue of services).

As IPAM (IP Address Management) is a key process within any IT service automation workflow, it becomes extremely beneficial for companies to integrate ITSM to the IPAM of any DDI (DNS-DHCP-IPAM) solution.

One such ITSM/IPAM alliance is that between ServiceNow and EfficientIP. The EfficientIP SOLIDserver APIs have been designed to be leveraged by most orchestration tools. This has enabled a plugin ("activity pack") to be created to simplify interactions between the two.

The benefits of the ServiceNow/EfficientIP integration include:

- reduced complexity
- accelerated service rollout
- ensured policy enforcement
- error-free configurations

The "Activity Pack" provides all necessary tools for easily interacting with SOLIDserver's REST API from within any workflow defined in ServiceNow. Some basic workflows have already been provided (see below).

Use of all API calls present in the activity pack make it possible to construct ServiceNow dynamic forms that will be used by end users. Presenting users solely valid information from the IPAM ensures that only requests which are totally accurate are performed in the process, thus removing potential of configuration errors. As a consequence, user experience is greatly enhanced for network administrators.

EfficientIP offers also potential to make use of IPAM metadata - bringing capability to link workflows together and enrich information quality in the ITSM process. This is a first step towards an apps enablement strategy.

### ServiceNow Orchestration

ServiceNow orchestration is a specific application that automates simple to complex sets of activities and workflows on various IT components outside the ServiceNow base service. The orchestration system includes packs of activities that can be used to automate IT and business processes on standard operations. In addition to these pre-built activity packs, EfficientIP provide a specific activity pack covering access to the DDI rich feature set.

The Activity Pack provided by EfficientIP is used for building workflows in ServiceNow. The workflows can be bound to a service and exposed to the end user in a catalog for immediate ordering (e.g. an IP address to install a printer or a server). The activities could also be used in more complex workflows that bring orchestration value, like the provisioning of a complete application infrastructure in which IP networks, IP addresses and DNS records will be required. This allows full automation of the build process which is required in digital transformation.

The set of objects available in SOLIDserver that are exposed to the ServiceNow activities are organized in a hierarchy in order to ease construction of the service catalog which will be either accessible to end users or utilized in elaborate workflows.



In addition to the IP addresses and all the network objects in the IPAM, some activities are also available on the DNS side, in order to work on the zones and on the records. For example one could build a workflow to order a zone for an application deployment or simply add some records for servers or software components.



The set of activities included in the activity pack cover the DDI categories of IP networks and DNS objects with a rich set of functions:

- Find free: allows retrieving a set of available objects in a category in order to reserve it afterwards
- Create / edit / delete: manipulation of the object
- Get info: can get all the information on an object, could also be used to verify an action has been performed between workflow steps
- Get all: list all the objects in a category

The availability of each function with regards to the object in SOLIDserver is shown in the following table:

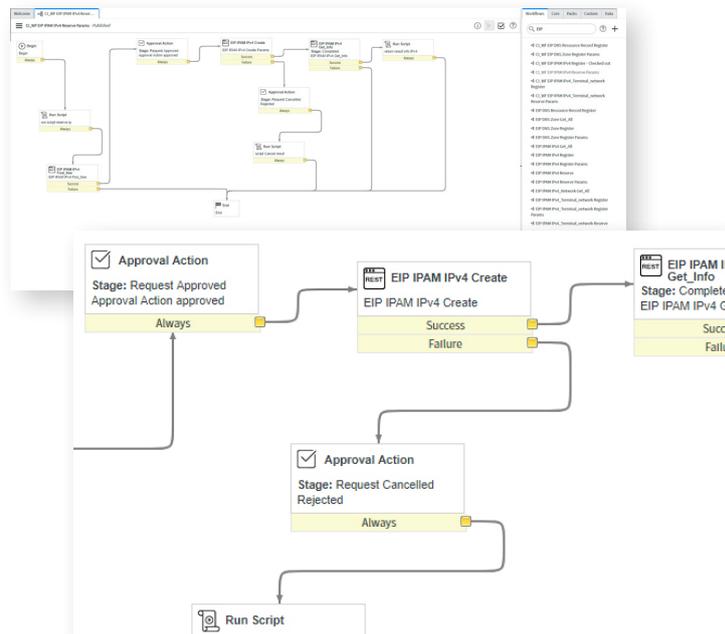
	Find free	Create	Edit	Delete	Get info	Get all
IP Space		✓	✓	✓	✓	✓
IP network	✓	✓	✓	✓	✓	✓
IP pool		✓	✓	✓	✓	✓
IP address	✓	✓	✓	✓	✓	✓
IP alias		✓	✓	✓		
DNS zone		✓	✓	✓	✓	✓
DNS RR		✓	✓	✓	✓	✓

## Example Workflows and Services

In addition to the full activity set and API bindings provided in the activity pack, some workflows and services are included in a catalog, mainly as examples of how the activities could be integrated and how dynamic forms could be created for enhancing user experience.

The demonstration workflows provided cover the following macro activities:

- Find a free IPv4 address in the network and reserve it - automatically creates the DNS records (forward and reverse)
- Register a specific IP address and manage the DNS records
- Find the next free network within a range and reserve it - this network could either be global or terminal (used to directly host devices that can be managed by DHCP)
- Register a DNS Zone, e.g. for hosting a new application or deploying a new site network
- Register a DNS resource record (RR), for example to expose an application to users

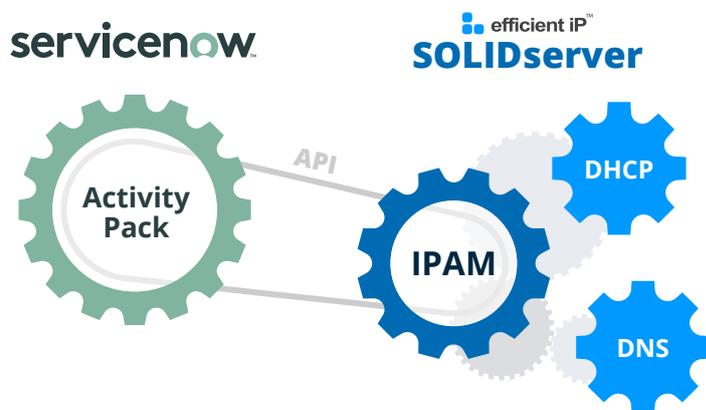


## Technical integration between ServiceNow and EfficientIP SOLIDserver

Within the ServiceNow outbound integration rest message, the Activity Pack adds 43 methods bound to SOLIDserver APIs. These REST calls are available for any integration within ServiceNow for specific development and have been used to build the high level activities.

The REST calls are issued by the ServiceNow Orchestration engine towards the SOLIDserver API endpoint. The communication leverages the security proposed by TLS for certificate validation and call authentication. The credentials used for the communication will be provided in SOLIDserver with the appropriate rights to perform the necessary actions on the IPAM objects.

Enterprise API managers can manage the exposure of SOLIDserver to improve control and enforce enterprise security policies, or to take advantage of an optional ServiceNow MID Server if already installed for other legacy communications.



As one of the world's fastest growing DDI vendors, EfficientIP helps organizations drive business efficiency through agile, secure and reliable network infrastructures. Our unified management framework for DNS-DHCP-IPAM (DDI) and network configurations ensures end-to-end visibility, consistency control and advanced automation. Additionally, our unique 360° DNS security solution protects data confidentiality and application access from anywhere at any time. Companies rely on us to help control the risks and reduce the complexity of challenges they face with modern key IT initiatives such as cloud applications, virtualization, and mobility. Institutions across a variety of industries and government sectors worldwide rely on our offerings to assure business continuity, reduce operating costs and increase the management efficiency of their network and security teams.

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