

SNAPology

The Genesys Methodology[™] applied to our ServiceNow Application Package (SNAP) program.

Executive summary

The goal of SNAPology is to streamline the process to successfully build and deploy a new ServiceNow request process. It includes procedures and documentation that has been proven to facilitate successful projects. This document is intended for use by project stakeholders who want to understand the process and how it will apply to them during the course of implementation. The following sections provide details of SNAPology from both a conceptual and practical perspective.

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Methodology

Design lenses

SNAPology uses 4 "lenses" through which we analyze and design a request application ("app") in ServiceNow. These lenses ensure that all aspects of the application are considered and addressed and make it into the final product.

Lens	Description
Data	Request processes in ServiceNow may include very few data elements or in some cases quite a large number. Understanding these elements is a key part of a successful build. SNAPology provides a structure to ensure all elements are considered and properly handled.
People	From the submitter to approvers/signers to fulfillers, deep understanding of the people involved in a request process and how they will interact with the app is vital. SNAPology takes a structured approach to understanding the people involved in a process and how they interact with data and processes.
Process	Request processes may be very simple or contain many steps. Creating a common understanding of these steps is critical to ensure a proper design. SNAPology provides the tools needed to ensure that the build team understands the processes and how they affect the design and build of the system.
Technology	Often, there are specific technical considerations that are important in order to build a request processes that operates efficiently and is maintainable over the long term. This can include considerations about integrations with other systems or how to approach the workflow process. SNAPology defines critical technical considerations as an early part of the discovery process and ensures that client best practices are followed.

Data

Every request process includes data elements that are required for successful completion. For SNAPology, we separate these elements into 4 categories:

Request data elements

Data elements that must be provided by users during the request process either at submission or by approvers/other users during the process.

Data enrichment elements

Data elements that are retrieved from "outside of the app" (either from ServiceNow or other systems) in order to augment request data. This is used to facilitate reporting or to provide the submitter or other process users with context that is necessary or helpful to completion of their task.

Validation data elements

Data elements (usually lists) used to validate request data. For example, a list of states or zip codes.

Process control data elements

Data elements used to control the workflow and other processes that are part of the request. A common example is where a request needs approval from the submitter's manager. In that case, the manager is an example of process control data that may be available in ServiceNow or in an outside system.

People

A typical request process includes a submitter (requestor), approvers, fulfillers and others.

Role	Description
Submitter	The user who initiates the request. In ServiceNow, this is commonly done in the Service Catalog (CMS) or Service Portal but sometimes the process can be initiated through a call to the help desk.
Approver	Approvers are responsible for ensuring the requests are appropriate from a business perspective and match the intended purpose of the application.
Fulfillers	Fulfillers perform tasks both inside and outside of ServiceNow that are needed in order to process the request.
Quality control	Quality control users, ensure that request data is properly/completely entered when simple validation rules (automated) are not sufficient. QC will often return requests to the submitter when request data is incorrect or insufficient.
Report data consumers	Report data consumers may be interested in information about the process itself (e.g. average time to fulfillment) or in the business data represented in the request (e.g. total invoice amount approved across North American requests).
Process administrator	Process administrators manage application settings and monitor for and correct error conditions that may arise (particularly related to integrations with external systems).

Process

In SNAPology, every request follows the pattern of request => augment => approve => fulfill => track => report but the details of each stage of the process can be radically different based on particular business needs.

Request

During the request process, the Submitter (requestor) will normally enter some initial information about the request using one of the ServiceNow user experiences such as the "platform" or Service Portal. Alternatively, requests can be initiated systematically using a scheduled job or as the result of another process.

Augment (and Quality Control)

After the request is initiated, it may be necessary to gather additional information from users or other systems in order to facilitate the approval and fulfillment of the request. This step may also include Quality Control where request data is scrutinized for appropriateness and completeness.

Approve

Often requests require approval from either a human participant or by applying automation rules.

Fulfill

Fulfillment of a request includes activities performed both inside and outside of ServiceNow. Some activities may be automated and others may require a human participant.

Track

As a Service Management platform, ServiceNow includes great features for tracking requests and ensuring they are fulfilled (if approved).

Report

Reporting on both process and business data can empower managers and executives to make more informed decisions. Reporting on process data includes things like: average duration from request to fulfillment; average time for approval; etc. Examples of business data reporting include: total budget requested by month (for a budget request process) or vendor count by region (for a Vendor onboarding request process). Business data can also be mixed with process data to yield reports like: average approved budget amount vs. average declined budget amount.

Logistics

Project roles

The following table lists the SNAPology roles and details of each. It's important to note that it's very typical for multiple roles to be filled by the same person and it's also common to have more than one person fulfill a role. Also note that all roles are either filled by General Networks Corporation (GNC) or your organization (Client)

Role	Organization	Description	Typical labor hours required
Sponsor	Client	Often the initiator of the project. Provides high level guidance on project objectives and helps escalate blockages that may occur during the project.	4
Owner	Client	The key project stakeholder and ultimate arbiter for the design of the app. Has the vision of the app to be built and communicates it to all other team members.	60
UAT Testers	Client	Perform comprehensive testing of the app in the Test environment. Ultimately responsible to approve the App from both technical and business perspectives. Often, this includes members of the design team.	40
Design team members	Client	Design team members are ultimately responsible for the user experience and functional design of the app. They accomplish this through participation in the design playbacks. Usually design team members include a cross section of the ultimate users and administrators of the app.	10
ServiceNow administrator	Client	The ServiceNow administrator is responsible to approve the technical design of the app and provides a single point of contact for all ServiceNow related issues.	10
App administrator	Client	The App administrator will ultimately perform needed administrative functions for the App. These may include provisioning new users, changing App settings, etc.	4
Account manager	GNC	Provides the escalation path for high level project issues. Handles any change orders or other financial issues that might arise during the course of the project.	N/A

Architect	GNC	Leads the GNC project team and is responsible for a design and architecture that meets the goals of the app as communicated by the Sponsor and App Owner.	16
Developer	GNC	Develops ServiceNow modules that are needed for implementation of the app. Often this role is filled by more than one person.	50
Unit Tester	GNC	Performs comprehensive testing of the app in the development environment, trains UAT testers and assists during the UAT process.	30
Coordinator	GNC	Coordinates communications, schedules meetings, tracks issues and monitors the budget for GNC.	24

Project phases

SNAPology is an agile/scrum-like application development methodology specifically created for ServiceNow request processes. As such, it includes many aspects typically found in those methodologies including a build first approach to design. However, the SNAPology process also includes sequential project phases often found in waterfall methodologies by way of facilitating a more predictable schedule for project participants.

Phase	Description	Key Participants	Deliverables	Relaxed schedule	Fast track
Initiation	Define project goals and objectives; produce the Project charter; hold the project kick-off meeting (if needed).	Sponsor Owner Architect	Project charter	4 days	2 days
Design	A series of prototypes and design playbacks where the Architect works with the Owner and Design team to arrive at the ultimate design for the App (need system access to start).	Architect Owner Design team Developer		20 days	10 days
Build	Any remaining development needed to prepare the App for UAT.	Architect Developer Unit tester		10 days	5 days
Test	Deployment of the App to the Test environment; training of the UAT testers on usage of the system and their responsibilities related to approval of the design; signoff by the Owner and UAT testers.	Owner UAT Testers Architect Developer Unit tester	UAT test report As build design spec	20 days	10 days
Deploy	All preparation steps needed in anticipation of deployment of the App to the production environment followed by the deployment itself including "proof of functionality" testing in production.	Developer ServiceNow Administrator	Admin guide Quick reference	4 days	2 days
Hypercare	General networks is on call to handle any issues that may arise with the app. General networks developers will assist in troubleshooting and make needed fixes.	All		30 days	30 days
Review	A review of the project and the app to identify remaining issues, lessons learned and future plans.	Sponsor Owner Architect Account manager	Project review	2 days	1 day
Total				12 weeks	6 weeks

Meetings			
Meeting	Required Participants	Duration	Agenda
Pre kick-off	Account manager, Architect, Sponsor	Initiation day 1 30 minutes	Introductions (Account Manager) Describe project & goals (Sponsor) Define roles (Architect) Establish high level schedule (Architect) Schedule next meeting (Architect)
Design abstract definition	Architect, Developer, Sponsor, Owner, Coordinator, ServiceNow administrator	Initiation day 2 1.5 hours	Define People Define Process Define Data Define Technology
Kick-off	All	Initiation day 4 30 minutes	Introductions (Sponsor) Project description/goals (Sponsor/owner) Project timeline (Architect) Q&A
Stand-ups	Owner, Architect, Developer, Coordinator	30 minutes 2x/week beginning on Design day 1	Last week This week Next week Blockers Prototype demo
Playback 1	Owner, Architect, Design team members, Developer, Coordinator	1 hour Design day 5	Prototype demonstration Q&A/design discussion
Playback 2	Owner, Architect, Design team members, Developer, Coordinator	1 hour Design day 10	Prototype demonstration Q&A/design discussion
Playback 3	Owner, Architect, Design team members, Developer, Coordinator	1 hour Design day 15	Prototype demonstration Q&A/design discussion
Playback 4	Owner, Architect, Design team members, Developer, Coordinator (as needed)	1 hour Design day 20	Prototype demonstration Q&A/design discussion
UAT training	Coordinator, UAT Testers, Owner, Architect	Test day 1 1 hour	Demonstration Testing instructions Q&A
UAT results & Go/no-go	Sponsor, Coordinator, UAT Testers, Owner, Architect	1 hour Test day 20	Overview Remaining issues Decision
Deployment planning	Owner, Coordinator, Developer, ServiceNow administrator	30 minutes Deployment day 1	Detailed schedule Risk areas
Production deployment	Coordinator, Developer, ServiceNow administrator	1 hour Deployment day 2	ServiceNow deployment eSignifi deployment Application settings
Deployment check-in	Owner, Coordinator, Architect, Developer, ServiceNow administrator	30 minutes Deployment day 4	Status Issues Action items
Project review	All	2 hours Review day 2	Successes Lessons learned Action items

Deliverables

Documentation deliverables

Deliverable	Description	Author(s)	Approver
Project charter	A document that includes information about the project for consumption by project members as well as interested managers and executives.	Architect Coordinator	Sponsor App owner
Design abstract	A 3-6 page document that details the data, people, processes and technology considerations for the App.	Architect Owner	Owner
As built design spec	A 3-5 page document that identifies all technical components of the App along with a Visio drawing of the overall process flow.	Architect Coordinator	App owner ServiceNow administrator
User acceptance test report	A 1-2 page document that details the results of the user acceptance test, identifies any outstanding issues and is signed by the Owner by way of approving the system design.	Architect Owner Design team	
App administrator guide	A 1-2 page document that provides a guide for the App administrator including explanations of systems settings and common procedures.		App owner App administrator
App quick reference	A 1-2 page document that provides a quick introduction for users of the app.		App owner
Project review	A 2 page document that details the results of the project and lessons learned.		App owner Architect
Status reports	A 1 page document, typically produced weekly, that reviews progress from the prior week, current activities, plans for the following week and any blockers that need resolution.		Architect
Deployment instructions	A 2-3 page document/email that provides instructions from the Developer to the ServiceNow administrator on the procedure to deploy the App from the Test environment to Production.		

Technical deliverables

ServiceNow unless otherwise specified

Component	Description
Record producer/catalog item	Provides the primary interface for requests initiated
	through the Service Catalog (CMS) or Service Portal.
General Networks Record List widget	Provides highly functional submitter visibility from the
	Service Portal (comes at no extra charge with SNAP).
Workflow	A ServiceNow workflow process that provides all of the
	approvals, tasks and other steps needed for the App.
Homepage (dashboard)	Provides the App Administrator with statistical information
	about the App and links to change App settings.
System properties	For all configurable properties of the App. This allows the
	App Administrator to control the App without the need for
	code changes.
App specific script include	Central location for all Javascript functions necessary to
	implement the App.
Roles for users and admins with appropriate ACLs	ServiceNow roles often including a [App] User role and an
	[App] administrator role but may include others as needed.
Dev -> Test update sets	Update sets used to deploy the app from Dev to Test (QA)
Test -> Production update sets	Update sets used to deploy the app from Test to
	Production.