Gov/Ready.

Making Compliance Easier gregelin@govready.com

> OSCAL tools and integration and interoperability NIST 2nd OSCAL Workshop, Feb 2021

GovReady Open Source GRC



User Focus → **User Friendly**

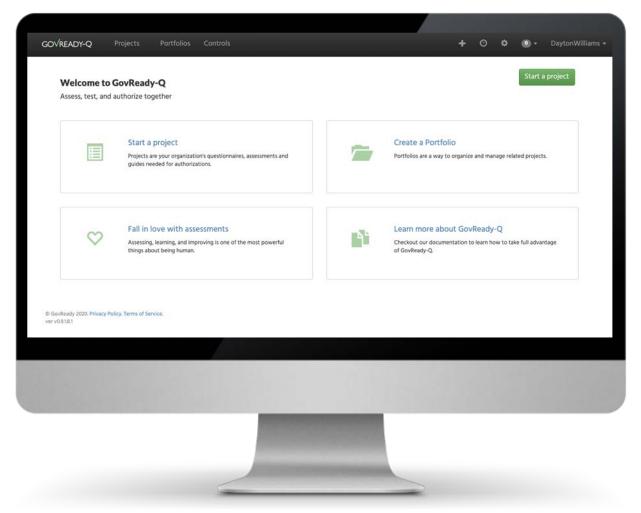
Step-by-step guidance

regardless of compliance

expertise

API for Continuous Monitoring

Dynamically push CI/CD scans, ports & protocols, and more into SSP



Making Compliance Easier

Pre-Assessment

Give Devs and ISSO's a way to secure themselves early in the SDLC



Secure Platform

- Supports database encryption
- Supports FIPS 140-2 certified systems
- HTTPS TLS encrypted sessions
- Single Sign On (Proxy Authentication)
- Granular Access Control





Federal Funded R&D, Pilots

DHS S&T Research & Development contract and pilot funding

GovReady started with the idea that compliance is not security and you shouldn't have to read hundreds of pages to get an ATO. We developed for the compliance-as-code revolution that is now arriving.

R&D Funding

2016

- DHS S&T funds R&D
- User Centered Research
- Early prototypes

Pilot funding

2018

- DHS S&T funds Pilots
- DHS Digital service funds prototyping
- B&D Consulting (for Navy) Pilot
- DOD Contractor uses for 800-171
- Fortune 50 Healthcare Co testing

Early Adopters

2019

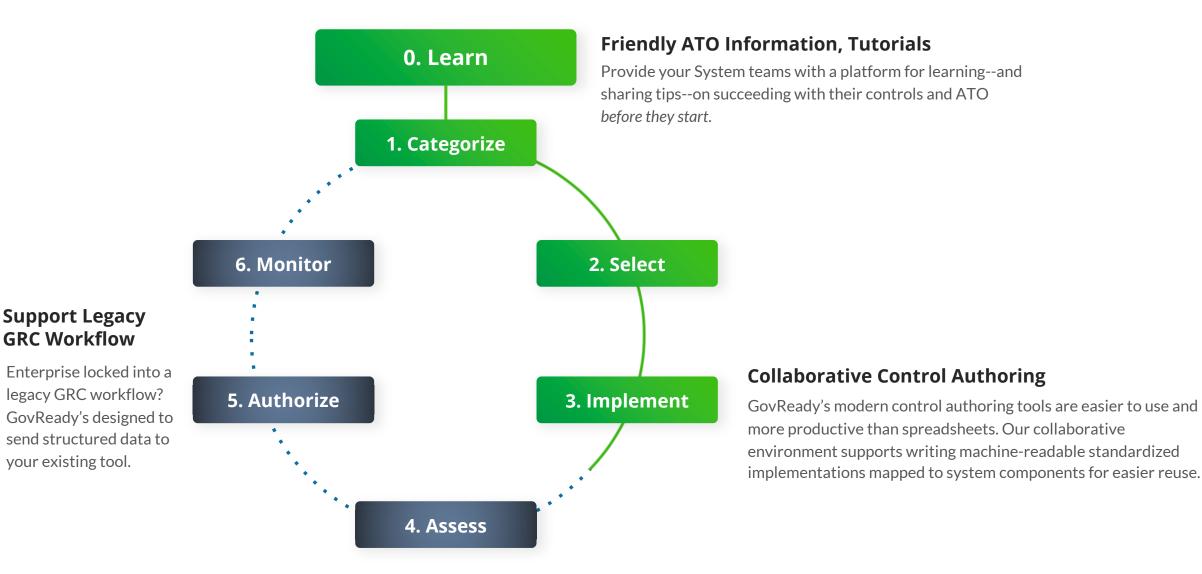
- DHS CBP Pilot > Adoption Decision
- Fortune 50 Healthcare Co adopts for internal cyber assessments
- Accepted into DCode Accelerator
- RMF 2.0 Data Automation SME support for USDA CISO

Enterprise Deployments

2020

- Deployment in DHS CBP Cloud
- GovReady ATO (in progress)
- Air Force SBIR Awardee (800-171)
- Commercial IT Managed Services (PCI) 3
- Wazuh Endpoint monitoring integration

GovReady's Special Focus on Steps 1-3 of the RMF





Providing controlrelated information in machine-readable formats. NIST, in collaboration with industry, is developing the Open Security Controls Assessment Language (OSCAL). OSCAL is a set of formats expressed in XML, JSON, and YAML. These formats provide machine-readable representations of control catalogs, control baselines, system security plans, and assessment plans and results.

OSCAL-Support Compliance as Code

GovReady is built around next generation, machine-readable compliance content format NIST OSCAL.

OSCAL Control Catalogue

GovReady controls catalogs use NIST OSCAL format under the hood.

Support for Compliance as Code

GovReady control content editing is designed to map control content to system elements and produce machine-readable OSCAL component information.

Compliance as Code Pioneer

GovReady has been involved with Compliance as Code initiatives from the beginning.

DHS CBP

Flexible, complimentary support for ATP and ATO processes

Description

DHS CBP Office of Information & Technology (OIT) picked GovReady to pilot for Lightweight ATO over legacy GRC tools because of its easier customization. Pilot proved GovReady supported standardized control narratives, online PTA process, and generating Test Plans. Pilot assessed deploying GovReady in CBP's cloud environment with CBP's DevOps tools. Decision made for GovReady production deployment to improve the current ATP and ATO process, identifying ways to normalize template language used by common control providers (CCPs), and minimize the burden on the end users, and streamline first three steps of NIST RMF to support other GRC tools.



Surprise Value in Privacy Threshold Analysis

Pilot revealed new utility and use cases for DHS Privacy Offices and the Privacy Threshold Analysis (PTA).



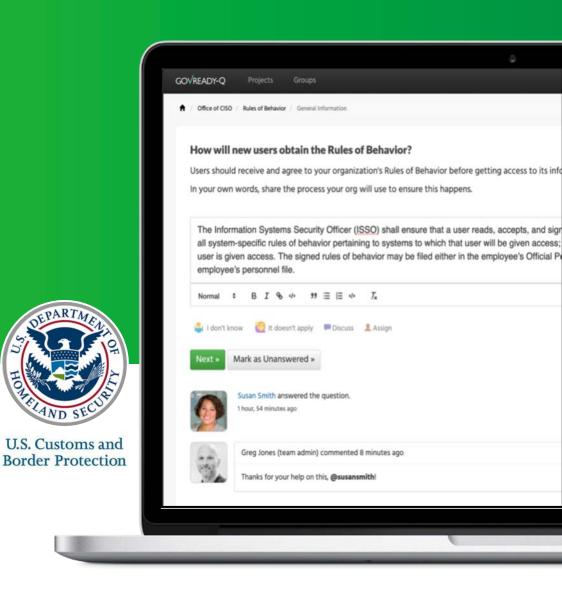
Decision to Move Forward to Production

Pilot concluding with decision to move GovReady into full production within CBP.



Deployed in CBP Cloud Environment

GovReady-Q deployed in a DHS cloud environment with support for DHS SSO and CBP DevOps Pipeline.



Download SSP OSCAL JSON

	localhost:8000/tasks/194/system-secu		ssp_v1_oscal_json.json
	Zoom Temp Bookmarks ~ Task Kiwi ~ User Legin Q Docs pinboard-this GitHub ~ Cod	▲▶ ssp_v	v1_oscal_json.json ×
1 / CustomerX / Test IT System / Syst	Controls Component Library App Library	2 "sy 3 "i 4 "i 5 6 7 8 9 .} 10 "	import-profile": {
and we're done		12 }	"href":-"profile_path" '
Available documents		14 15	systemcharacteristics": { "systemids": [.{ .°id":-"govready-75"
Document	Downloads	17	
SSP v1	Word (docx) Open Office (odt) HTML Markdown Plain Text	19 20 21	"system-name": "CustomerX Website", "system-name-short": "CXW", "description": "This system supports CustomerX Website\\.",
SSP v1 (OSCAL/JSON)	OSCAL (json)	23	"security-sensitivity-level": " <fisma level="">", "system-information": {</fisma>
SSP v1 (OSCAL/XML)	OSCAL (xml)	25 · · · 26 · · · 27 · · ·	<pre>"information-types": [</pre>
Your Answers		29 · · · 30 · · ·	<pre>"confidentiality-impact": { "base": "information type confidentiality impact" },</pre>
Question	Answer	32 ···· 33 ····	<pre>"integrity-impact": { "base": "information type integrity impact" },</pre>
No questions needed to be answered in Continue to ATO Letter » Return to project	this section.	35 36 37 38 39 40 41 42 43 43 44	<pre>}</pre>
I≣ Review »		46 47 48 50 51 52 53	<pre>"state": "operational" }, "authorization-boundary": { "description": "System authorization boundary, TBD" } system-implementation": { "users": {}, "components": { "users</pre>

Component Library

••• < > 🗈			ocalhost:8000/controls	s/components	Ċ		0	00
	Zoom Temp Bookmarks 🛩 Task.Kiwi	 User Login Q Docs p 	nboard-this GitHub 🗸	CodeSnippets x-edit	GovReady ~ Costpoint 7 N	AanTech Portal ManTech		+
GO√READY-Q	Projects Portfolios Cont	rols Component Lit	rary App Librar	У		+ 0	* •	Greg +
	ent Library cess to 54 components.		Man	age Import Records	Create a Component	Import OSCAL Co	omponent	
	Available Components							
	Test Cmpt Name modified							
	Test Cmpt2 New Name							
	Cmpt3 (New Name)	And c	nd create a description for CMPt3					
	Cmpt4							
	Component1							
	Cmpt5							
	Cmpt6							
	Cmpt8							
	Cmpt10							
	2 Twelve (Flat)							
	HelpRace							
	Auth0							
	AWS IAM							
	AWS IAMS - Deprecated	test d	escription					
	Item 1							

Component Control Authoring

••• <> ••	Zoom Temp Bookmarks 🗸		/controls/75/controls/catalogs/NIST pinboard-this GitHub v CodeSi			ManTech Portal ManTech	• • •
GO√READY-Q	Projects Portfolios	Controls Component	Library App Library			+ ©	🌣 💽 - Greg -
	Test IT System > S	elected Controls			AC-3	Look up	
	AC-3 Access Enfo	rcement					
	NIST SP-800-53 rev4			-	-		
	Control 🖌 Co	mponent Statements 2	Combined Statement) OSCAL	OpenControl		
		entations Statements					
	infrastructure and da align user accounts w EC2/VPC/Amazon RD the organization has and/or role members	WS Identify and Access Mar ta in Amazon S3 buckets. The vith personnel functions relat S systems administration, I.T authorized and created, or fe	nagement (IAM) and Amazon e baseline IAM groups and rol ted to infrastructure/platform . auditing, etc.) Login/API acc ederated, IAM user accounts, ve specific access control poli- roles/groups.	es are associate management ess is restricted and assigned t	ed with access policies (e.g. Billing, Amazon I to those users for who he appropriate IAM gro	om up	
	Active Directory Status: Planned b. how we use active d	irectory					
	Add existing compo				Submit for related		
	Add component statement						
Open #component_controls or	this page in a new tab						



Deployed Features to accelerate RMF Steps 1 - 3

Next Gen Collaborative Questionnaires

- TurboTax-style guided questions
- Imputed questions/answers
- Discuss answers (with attachments)
- Assign questions to users
- 17 question types (datagrid, attachments)
- Dynamic question text (full HTML)
- Portable, YAML-based questionnaires
- In-line review/approve workflow feature
- Dynamic drop-in sub-questionnaires
- Questionnaire authoring tool
- Sample content for "Plan" documents

Compliance-as-Code Control Statement Editor

- Write narratives by component to standardize & reuse content
- View/edit by control or component
- Inherited Common Controls
- Generate OSCAL, OpenControl machinereadable control statements

Project Management

• Portfolios for projects

Output Templates

- Library of artifact templates
- Add custom artifact templates
- Auto-populated SSP
- Auto-populated content links back to questions for easy editing
- Multiple Templates per questionnaire
- Downloadable as Word, Markdown, Text

Simple, RESTful API

- Integrate content from scans
- Populate evidence from systems
- Exchange info with other GRC, tools

Export to spreadsheets

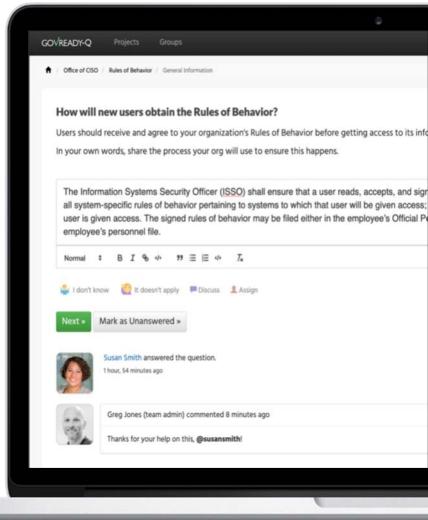
• Generate export data for legacy GRC

Enterprise-Ready

- Single Sign On
- Role-based access control
- Container Deployment

Customizable User Interface

- Completely customizable UI to support organization look and feel
- Customize / Replace pages
- Aria-compatible components for 508 accessibility compliance





GOVREADY

Contact us for additional information on this contract and GovReady Services.

917-304-3488gregelin@govready.com

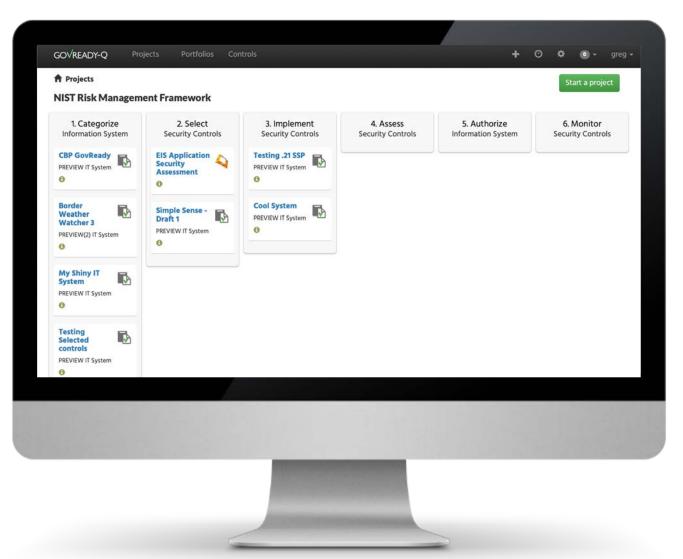
www.govready.com

THANK YOU

www.govready.com

EXTRA SLIDES

Understanding the RMF Modern UI for Agile Processes





Stages of NIST RMF

Lifecycle dashboard displays each project's progress through the steps of the NIST RMF.



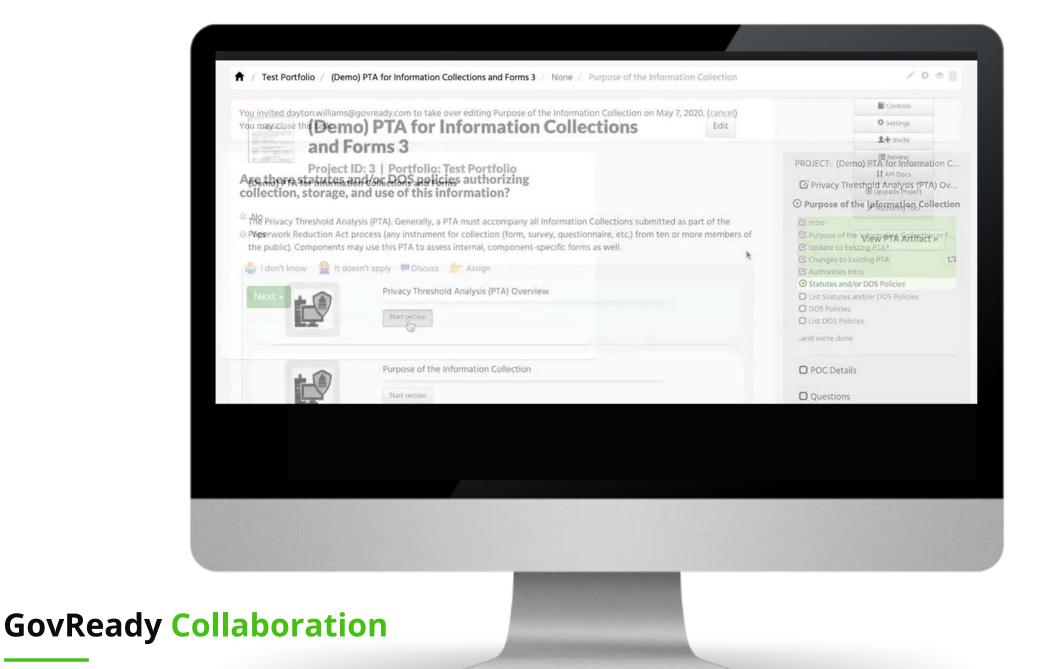
Security Control Status

Control implementation now tracked directly in database instead of questionnaires enabling richer metadata management including control status.



Next Tasks

Project display redesigned for better linear representation of modules and to dynamically show and hide modules to make next tasks clearer.



VREADY-Q P	rojects Portfolios			+
		5 S&T System tingency Plan		
Table of Contents				
Contingency P				
	I: Introduction and Purpo 2: Concept of Operations			
 Section 3: Activation and Notification Section 4: Recovery 				
o Section	5: Reconstitution			
o Section	6: Contingency Plan Testi	ng		
CONTINGENCY PLAT	N APPROVALS			
Name	Description		Date	
	System Admin		09/09/2019	

Information systems are vital to [[project.system__info.system__ame]] mission/business functions; therefore, it is critical that services provided by [[project.system_info.system_ame]] are able to operate effectively without excessive interruption. This information Technology Contingency Plan (ICP) establishes comprehensive procedures to recover [[project.system_info.system_ame]] audity and effectively following a service distuption

One of the goals of an IT Contingency Plan is to establish procedures and mechanisms that obviate the need to resort to performing IT functions using manual methods. If manual methods are the only alternative, however, every effort should be made to continue IT functions and processes manually.

Contingency Plan (CP)

GOVREADY-Q Projects Portfolios Controls

INTRODUCTION

The purpose of this memorandum is to establish a management agreement between System Organization and Organization A regarding the development, management, operation, and security of a connection between DHS S&T System, owned by System Organization, and External A, owned by Organization A. This agreement will govern the relationship between System Organization and Organization A, including designated managerial and technical staff, in the absence of a common management authority.

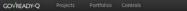
AUTHORITY

The authority for this agreement is based on PROCLAMATION issued by the SECRETARY OF ORGANIZATION on DATE OF PROCLAMATION.

BACKGROUND

It is the intent of both parties to this agreement to interconnect the following information technology (IT) systems to exchange data between DHS S&T System and External A. System Organization requires the use of Organization A External A.S database, and Organization A requires the use of System Organization's DHS S&T System's database. The expected benefit of the interconnection is to expedite the processing of data associated with "Project X" within prescribed timelines.

Memorandum of Understanding (MOU)



1. System Information

SYSTEM INFORMATION S&T System is a Web application hosted in the Org Hosting environment.

Nam liber tempor cum soluta nobis eleifend option congue nihil imperdiet doming id quod mazim placerat facer possim assum. Typi non habent claritatem instanz, est usus legentis in its qui facit corum claritatem. Investigationes demonstraventu lectores legere me lius quodi i legant saepius.

Organization	System Organization			
System Owner	John Doe			
Program Manager	Jane Doe			

1. INFORMATION SYSTEM NAME/TITLE

This System Security Plan provides an overview of the security requirements for the Information System Name (Enter Information System Abbreviation) and describes the controls in place or planned for implementation to provide a level of security appropriate for the Information to be transmitted, processed or stored by the system, Information security is vital to our critical infrastructure and its effective performance and protection is a key component of our national security program. Proper management of Information technology systems is essential to ensure the confidentiality, integrity and availability of the data transmitted, processed or stored by the Enter Information System Abbreviation Information system.

The security safeguards implemented for the Enter Information System Abbreviation system

System Security Plan (SSP)

COVREADYQ Projects Particility Incident Response Plan DHS S&T System Incident Response Plan (IRP) Table of Contents • Applicability • Orners • Incident Response Plan (IRP) • Response process • Initiate • Comms at the Initiate phase • Comms at the Assess phase • Comms at the Remediate phase • Comms at the Remediate phase • Retrospective • How this document works

Applicability

+ 0

Note: This Incident Response Plan applies to systems for which System Organization has negotiated and defined Incident Response/Contingency Plan (RCP) operations. Each IRCP-managed system will have a specific, tailored version of this Incident Response Plan or in some cases a completely unique incident Response Plan will be developed.

This Incident Response Plan provides baseline guidance for the System Organization's process for

s and other discuptions of a Syste

Overview

Incident Response Plan (IRP)

Support Templates, Guides

The GovReady application serves to streamline the Authority to Operate (ATO) process by providing a secure environment where teams can collaborate and complete authorization packages across an organization. Team members using GovReady have access to a suite of templates and questionnaires that serve to meet the requirements associated with achieving an ATO quickly.