

The background of the page is a dark, blue-tinted photograph of a large industrial building with a curved, ribbed facade.

FEDRAMP 20X

**A COMPREHENSIVE
GUIDE FOR YOUR COMPANY**

INTRODUCTION



FedRAMP 20X: The Future of Compliance Automation. Agility. Real-Time Security.

The Federal Risk and Authorization Management Program (FedRAMP) is a government-wide initiative that provides a standardized approach to security assessment, authorization, and continuous monitoring for cloud products and services used by federal agencies. Built on the foundation of NIST SP 800-53 controls, FedRAMP ensures that Cloud Service Providers (CSPs) meet strict cybersecurity requirements before their solutions can be used in the federal space. By creating a centralized, reusable framework for authorizations, FedRAMP reduces duplication of effort across agencies, accelerates cloud adoption, and strengthens the overall security posture of government IT systems.

FedRAMP 20X represents the next evolution in the FedRAMP program, introducing a modernized approach to authorization and continuous monitoring that emphasizes automation, agility, and real-time security assurance. Designed to address the growing complexity of cloud environments and the need for faster, more scalable compliance processes, FedRAMP 20X aims to streamline the path to authorization by leveraging machine-readable artifacts, continuous control validation, and tighter integration with development and operational workflows. This forward-looking initiative aims to alleviate the burden on both Cloud Service Providers (CSPs) and federal agencies, while enhancing the visibility, speed, cost-effectiveness, and reliability of risk management in the cloud.

Key Enhancements in FedRAMP 20X

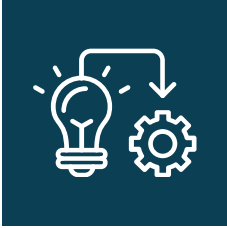
Emphasis on Automation of FedRAMP Security Control Validation: Automating a significant portion of security assessment and continuous monitoring is a primary goal of FedRAMP 20X. The intent is to validate 80% or more of the requirements through automated methods, thereby reducing reliance on manual, narrative documentation. This involves employing tools for the ongoing validation of security controls and the generation of real-time security posture reports of the FedRAMP-authorized cloud service offering (CSO).

Standardized, Machine-Readable Reporting Requirements:

FedRAMP 20X will leverage the Open Security Controls Assessment Language (OSCAL) to emphasize automation. OSCAL provides machine-readable formats (XML, JSON, YAML) to standardize security control information, improving the efficiency, consistency, and interoperability of security assessments and compliance. This common language streamlines documentation, implementation, and assessment for stakeholders, enabling the automation of tasks such as monitoring, auditing, and reporting. OSCAL's data-centric and extensible design supports various federal compliance frameworks such as NIST SP 800-53, FedRAMP, and CMMC.

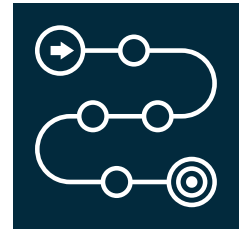
The Transitioning Emphasis of Key Security Indicators:

FedRAMP CSPs have communicated the need for a more dynamic and efficient approach to FedRAMP assessments. FedRAMP 20X is spearheading the development of Key Security Indicators (KSIs). These KSIs represent a fundamental shift from the often lengthy and narrative-based traditional FedRAMP security assessment reports (SARs) that are a staple of FedRAMP revision 5. Instead, KSIs are envisioned as concise, unambiguous, and quantifiable metrics designed for ease of understanding and consistent evaluation across the library of CSOs listed in the FedRAMP Marketplace. A core tenet of the KSI framework is its inherent verifiability through automated processes, enabling tools and systems to automatically validate a FedRAMP cloud service's adherence to security requirements, thereby significantly reducing reliance on manual documentation review. Furthermore, KSIs are intended to be contextually relevant, allowing for tailoring to the specific security functionalities and unique risk profiles of individual CSOs, leading to more focused and precise assessments. This adaptability ensures that security evaluations are not only efficient but also directly address the critical security characteristics of each distinct cloud environment.



Adoption of Industry Standards:

As OSCAL becomes more widely adopted by existing Cloud Service Providers (CSPs) holding a FedRAMP authorization and by hopeful CSPs seeking FedRAMP authorization, the OSCAL framework will change the landscape of how those CSPs manage their industry-recognized compliance and certification standards. By facilitating a standardized, machine-readable format for security controls and assessment procedures, OSCAL will empower CSPs to leverage their existing investments in certifications like PCI DSS, SOC 2, ISO 27001, and CMMC, which often address similar security objectives as FedRAMP controls, that can be mapped and potentially reused. This strategic alignment aims to substantially diminish the burden of redundant compliance efforts and significantly streamline the often complex path to achieving and maintaining FedRAMP authorization. Ultimately, this fosters greater efficiency and allows CSPs to focus more on delivering secure services rather than navigating duplicative bureaucratic hurdles.



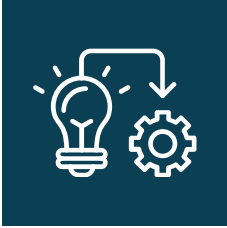
Reduction in manual checkpoints:

FA shift is occurring away from the conventional method of conducting annual security assessments and towards continuous, automated monitoring. This transition will empower agencies with an up-to-the-minute understanding of the CSO's security posture, facilitating more rapid identification of weaknesses and swifter reactions to instances of non-compliance. Furthermore, continued, automated monitoring will pave the way for the FedRAMP Program Management Office (PMO) to the continuous Authority-to-Operate (cATO) model and potentially sunset the need for cumbersome and costly annual FedRAMP assessments performed by FedRAMP-accredited 3rd-Party Assessment Organizations (3PAOs).



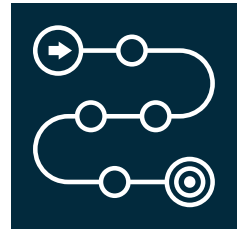
The Transitioning Emphasis of Key Security Indicators:

FedRAMP CSPs have communicated the need for a more dynamic and efficient approach to FedRAMP assessments. FedRAMP 20X is spearheading the development of Key Security Indicators (KSIs). These KSIs represent a fundamental shift from the often lengthy and narrative-based traditional FedRAMP security assessment reports (SARs) that are a staple of FedRAMP revision 5. Instead, KSIs are envisioned as concise, unambiguous, and quantifiable metrics designed for ease of understanding and consistent evaluation across the library of CSOs listed in the FedRAMP Marketplace. A core tenet of the KSI framework is its inherent verifiability through automated processes, enabling tools and systems to automatically validate a FedRAMP cloud service's adherence to security requirements, thereby significantly reducing reliance on manual documentation review. Furthermore, KSIs are intended to be contextually relevant, allowing for tailoring to the specific security functionalities and unique risk profiles of individual CSOs, leading to more focused and precise assessments. This adaptability ensures that security evaluations are not only efficient but also directly address the critical security characteristics of each distinct cloud environment.



Adoption of Industry Standards:

As OSCAL becomes more widely adopted by existing Cloud Service Providers (CSPs) holding a FedRAMP authorization and by hopeful CSPs seeking FedRAMP authorization, the OSCAL framework will change the landscape of how those CSPs manage their industry-recognized compliance and certification standards. By facilitating a standardized, machine-readable format for security controls and assessment procedures, OSCAL will empower CSPs to leverage their existing investments in certifications like PCI DSS, SOC 2, ISO 27001, and CMMC, which often address similar security objectives as FedRAMP controls, that can be mapped and potentially reused. This strategic alignment aims to substantially diminish the burden of redundant compliance efforts and significantly streamline the often complex path to achieving and maintaining FedRAMP authorization. Ultimately, this fosters greater efficiency and allows CSPs to focus more on delivering secure services rather than navigating duplicative bureaucratic hurdles.



Reduction in manual checkpoints:

FA shift is occurring away from the conventional method of conducting annual security assessments and towards continuous, automated monitoring. This transition will empower agencies with an up-to-the-minute understanding of the CSO's security posture, facilitating more rapid identification of weaknesses and swifter reactions to instances of non-compliance. Furthermore, continued, automated monitoring will pave the way for the FedRAMP Program Management Office (PMO) to the continuous Authority-to-Operate (cATO) model and potentially sunset the need for cumbersome and costly annual FedRAMP assessments performed by FedRAMP-accredited 3rd-Party Assessment Organizations (3PAOs).



The Role of FedRAMP-Accredited 3PAOs in a FedRAMP 20X World:

With FedRAMP 20X, the Third-Party Assessment Organization's (3PAO's) role is expected to evolve from primarily assessment to greater emphasis on validation. While still performing rigorous security control evaluations for CSPs, the automation and continuous monitoring enabled by OSCAL will facilitate a more dynamic and ongoing security posture assessment. This will likely shift the 3PAO's focus to validating the continuous effectiveness of automated processes and their data, ensuring the integrity and accuracy of real-time security insights, rather than relying solely on periodic snapshots. This transition requires 3PAOs to develop expertise in leveraging and interpreting machine-readable security data for continuous cloud service authorization validation.



Earthling Security's Perspective

How these changes validate Earthling Security's existing approach (e.g., automation, continuous monitoring):

The shift toward automation and real-time monitoring under FedRAMP 20X directly validates Earthling Security's long-standing approach to cloud compliance. For years, we have integrated automation and continuous control validation into our assessment and advisory services, allowing our clients to move faster while maintaining a strong security posture. FedRAMP 20X aligns with our belief that modern compliance must be dynamic, data-driven, and seamlessly embedded into operational workflows—principles that are already at the core of our methodology.

The company's long-standing use of security-by-design and code-based compliance practices:

Earthling Security has championed security-by-design and code-based compliance well before it became an industry standard. By embedding security controls into infrastructure as code (IaC) and leveraging repeatable, auditable configurations, we help organizations bake compliance into their cloud environments from the ground up. This proactive approach ensures consistency, accelerates deployment timelines, and supports the kind of automated evidence generation and policy enforcement that FedRAMP 20X is now institutionalizing.

Our commitment to enabling faster, smarter, and more collaborative authorization:

At Earthling Security, our mission has always been to make authorization processes more efficient, intelligent, and collaborative. We work side-by-side with both Cloud Service Providers and government stakeholders to reduce friction, clarify expectations, and accelerate compliance milestones. Through our combination of deep expertise, modern toolsets, and strong partnerships, we're uniquely positioned to help clients thrive in the FedRAMP 20X era, where speed, transparency, and continuous assurance are not just goals but requirements.

What Does FedRAMP 20X mean for CSPs and Agencies?

For Cloud Service Providers (CSPs), this blog signifies a pivotal shift towards a more streamlined and automated FedRAMP authorization process with FedRAMP 20X. The emphasis on OSCAL and Key Security Indicators (KSIs) promises to reduce the burden of manual documentation and annual assessments, enabling more cost-effective and faster times to authorization, with a greater ability to leverage existing industry certifications. This evolution allows CSPs to focus more on delivering secure services and less on navigating complex bureaucratic hurdles.

For federal agencies, FedRAMP 20X offers the promise of enhanced visibility into the security posture of their leveraged FedRAMP cloud services through continuous monitoring and real-time security posture reporting. The adoption of standardized, machine-readable formats and quantifiable KSIs will lead to more informed and timely risk management decisions, ultimately strengthening the security of government IT systems and accelerating the secure adoption of cloud technologies. The move towards a potential continuous Authority-to-Operate (cATO) model will also reduce administrative overhead and provide a more dynamic understanding of a CSP's security compliance.

Call to Action:

Are you ready to navigate the evolving landscape of FedRAMP 20X? As a Type-C FedRAMP-accredited 3PAO, Earthling Security is your trusted partner in embracing this new era of automated, real-time, continuous monitoring soon to be required by the FedRAMP PMO. Our proven track record of integrating automation, security-by-design, and code-based compliance aligns perfectly with the key enhancements of FedRAMP 20X.

Whether you're a CSP seeking faster authorization or a government agency aiming for real-time security assurance, we're here to help you move forward with confidence. Contact Earthling Security today to learn how our forward-thinking approach can streamline your FedRAMP journey and ensure a more secure, efficient cloud future.

Why Earthling Security?

- As FedRAMP 20X reshapes how cloud services achieve and maintain authorization, choosing the right partner is more critical than ever. At Earthling Security, we don't just support the transition — we've been building toward it all along.
- Long before FedRAMP 20X emphasized automation, machine-readable compliance, and continuous monitoring, Earthling Security was already implementing these principles with our clients. Our solutions are designed for speed, agility, and long-term scalability — exactly what 20X demands.
- We champion security-by-design and infrastructure-as-code (IaC) approaches that embed compliance directly into your environment. This means fewer surprises, faster audits, and automated evidence generation from the start.
- As a FedRAMP-accredited 3PAO (Type-C), we understand the FedRAMP landscape inside and out. From pre-assessment readiness to real-time control validation, our team knows what it takes to meet evolving PMO expectations — and how to get you there efficiently.
- We don't believe in cookie-cutter compliance. We collaborate with your internal teams, streamline your documentation, and help you leverage existing certifications through OSCAL mapping. Our goal is to reduce your burden while increasing your confidence.

Contact Us



877-282-2137



info@earthlingsecurity.com



www.earthlingsecurity.com