

Building Smarter Governments

The Power of API Integrations in Digital Service Delivery



State and local government agencies are ripe for digital modernization

For decades, government agencies across all levels have operated in silos, often building customized technology solutions to meet their specific needs at a specific point in time.

In many ways, government agencies have been grappling with how to keep pace with consumer expectations in a highly regulated environment — struggling with a variety of hurdles including complex regulations, payment architectures, inflexible core systems built by vendors with no motivation to modernize, and more.

Yet, governments are still working with legacy systems, siloed data, and isolated user experiences — a maze of legacy systems designed for departments decades ago, not the residents they serve right now (and certainly not the future).

Those custom-built systems quickly become dated, making it difficult for government agencies to keep pace with online user experiences crafted by public sector brands. Clunky systems aren't just annoying for consumers; they're also disconnected and inefficient for agency operations.

State and local governments are responding to consumer demand for digital channels by undergoing massive transformations. The focus has shifted from simply having a digital presence to delivering a great digital experience.

But transformations happen one system at a time. So a big part of modernization is connecting legacy back-end systems to modern web or mobile applications, and using API (application programming interface) integration is often the easiest way to achieve that.



A brief overview: APIs & API integrations

APIs enable software to connect and communicate with specific rules and protocols – like little messengers carrying information back and forth, so data can be shared easily, quickly, and securely. APIs can be used to connect all types of digital systems including applications, back-end software, and servers.

These days, virtually all web and mobile applications use API integrations to provide great digital experiences.

Types of APIs

Public



Information and services are available for most people to use for building their own applications. Public APIs are built using public information and can be used commercially.

Partner



Only specific authorized outside parties can use partner APIs; used to facilitate business-to-business data exchange and activities.

Internal/Private



Only for business use; internal APIs connect systems and data within the business to improve access and efficiency.

Low-code solutions and APIs: A powerful combination

The landscape has changed from decades-old physical systems to open-source, low-code software, across the majority of software categories. And you'll find that low-code software and API integrations pair well together; in fact, the use of APIs is a core ingredient in low-code platform development.

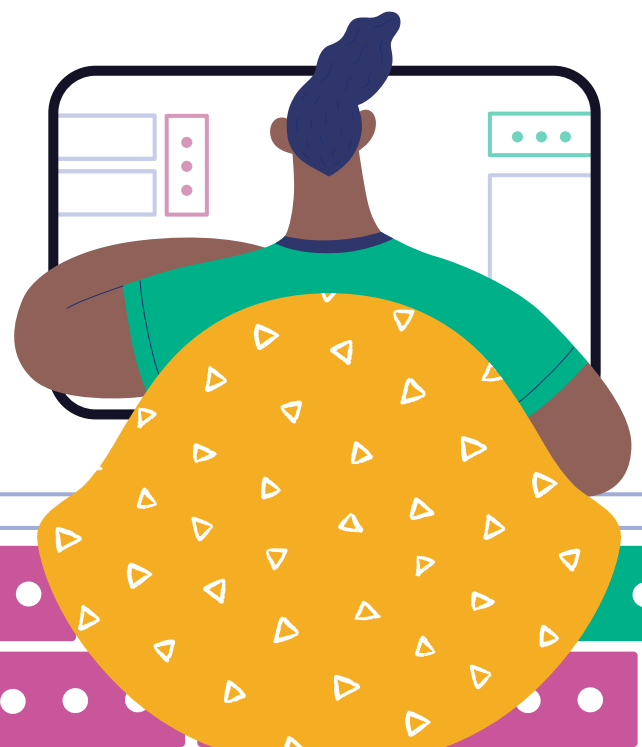
Most low-code/no-code software allow you to use APIs to integrate with other applications or systems – and the low-code solutions are flexible enough to complete different tasks yet accessible enough to build with little to no coding. The power of low-code solutions is using APIs without you even knowing you are using them.

Broader adoption of low code/no code solutions was named as a significant trend and one of the emerging IT areas that will be the most impactful in the next 3-5 years in [NASCIO's State of the States 2024: State of the States Forecast: What's in Store for 2024?](#)

Like building blocks, open API software can be flexibly assembled to achieve hundreds of different use cases.

Practically speaking, these types of solutions are often layered on top of legacy systems to enable greater collaboration, become more nimble, and minimize the expenses that accompany the back-end system of record upgrades. Open API software can be quickly configured to solve virtually any government need to deliver services and facilitate transactions online.

An approach based on use of low-code/no-code can drastically streamline development, making it faster to build and deploy resident-facing applications. The end result: government revenue is collected and distributed more quickly and efficiently, improving outcomes for our communities.



Accelerate modernization with API integrations

Understanding the value that API integrations bring to digital government services

Government agencies face numerous challenges with digital service delivery: security, data silos, tight budgets, customer experience expectations, and highly customized, outdated legacy systems that are huge lifts to move. But API integrations give governments the ability to modernize more efficiently – without sacrificing security.



Launch digital services, faster

API integrations are changing the way government agencies deploy services. Mobile applications, payment processing options, and new features can be created and launched quicker than ever – all supported by API integrations.

API integrations are the bridge between back-end systems of record, residents, and other agencies.



Single service to ecosystem

Logging into multiple portals (all those IDs and passwords!) to access government services can confuse and frustrate residents. However, thanks to technology like API integrations, jurisdictions have a chance to better serve residents: Partner and connect with government service providers in the area so residents have access to all services (such as water, electric, trash, DMV) in one place.



User experience

API integrations certainly aren't new. But government organizations don't always have the recipe to pull together multiple APIs or they need to build APIs on top of legacy software – essentially, agencies are playing a little game of catch-up in fully taking advantage of APIs.

Paired with cloud-based SaaS applications, agencies can create connected systems that give the IT team the freedom to share data between departments and databases. So even if you're dealing with a back-end system from the ice age, API integrations can link to user-friendly applications quickly and easily.



Security

Of course, connecting to a modern, easily navigated platform isn't the only thing API integrations are good for. API integrations can ramp up your data security structure; connect with a vendor that provides identity and access management service, for example, to provide residents and staff with trustworthy multi-factor authentication.

Should your agency use API integrations?

In short, yes. But let's dig into why: Sure, API integrations are the standard for cloud applications, but they can also extract the data from old servers and legacy databases.

Benefits of API Integrations

- ✓ **Automation:** Move and connect data between applications without regular manual processing
- ✓ **Improved data and reporting:** Get streamlined visibility across systems, enabling efficient monitoring of data and enhanced reporting
- ✓ **Scalability:** Expand connected systems, add new tools, and update applications without starting from scratch, growing as needs evolve
- ✓ **Cost savings:** Leverage existing functionalities and resources, so there's no need to rebuild everything from scratch
- ✓ **Innovations:** Launch innovative solutions with fewer resources, enhancing service delivery

Using APIs simplifies things for the IT team and allows residents to access the information they need in just a few clicks.



Where is your data stored?

Integrations with on-prem solutions usually involve a flat file exchange, which can be a little tricky and not as timely; however, APIs can be created to interact and grab data from these systems. And as data increasingly moves to the cloud, API connections get easier – and information exchange is much quicker.

Depending on the technology your agency uses, data can be stored in several ways and places, including secure clouds (like Amazon S3 or Dropbox), legacy databases, and possibly a network drive. Government agencies and vendors with public sector clients should use a government-grade service such as AWS GovCloud for sensitive information.

Cloud providers that cater to the public sector will provide end-to-end security, protect data using encryption, and have the expertise to maintain compliance with regulatory frameworks such as PCI, PIPEDA, and GDPR. But remember: You own your data.

What about data privacy?

Establishing guidelines and standards for API integrations to ensure security and compliance is more important than ever.

In 2023, **77% of respondents** from the government and public sector reported being victimized by an API security incident in the past year – yet, **96% maintained confidence in the tools and systems they used to protect APIs**. With the constant risk of fraud, tech leaders have zeroed in on the risks of data breaches and most tech teams have implemented real-time, frequent, and regular security testing.

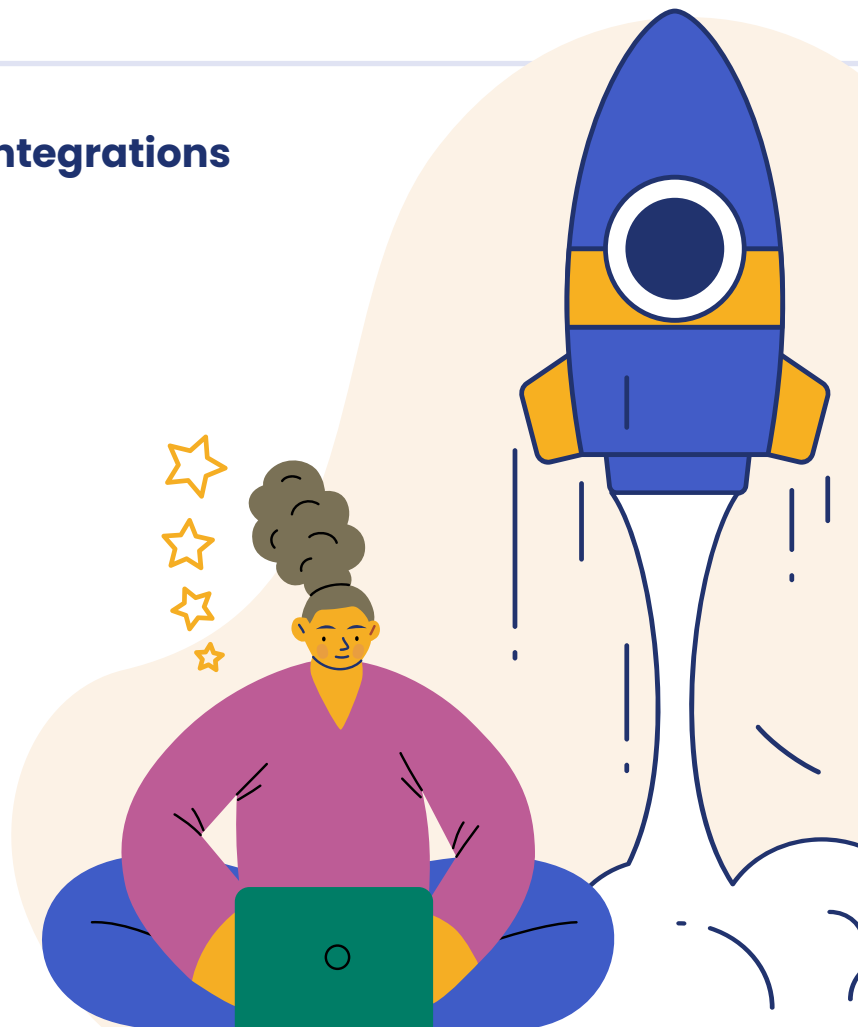
API governance is part of a strong data security strategy, controlling who can access certain applications, databases, and information. It can also help condense the APIs your agency is using, which simplifies security.

Several regulatory frameworks address resident privacy; however, the consequences of data breaches can be severe for both government agencies and residents. Having a stringent data security plan in place, and communicating that to residents, will help build trust in your digital services.

Prepare for the future with API integrations

As residents' expectations increase, API integrations are an essential tool for digital government service delivery. They can improve the user experience for your website and beyond, providing access to government services on mobile applications and in highly personalized digital accounts.

Forward-thinking governments are delivering information, services, and payment portals with an API-first approach – and they can satisfy future needs with limited work. API integrations allow agencies to be flexible, scalable, and competitive when they need it the most.



About PayIt

PayIt enables state and local government agencies to deliver a great resident payments experience that accelerates the shift to digital. Agencies choose PayIt to better achieve their mission through improved operational efficiency, customer support, and resident satisfaction. Our solutions span property tax, courts, utilities, DMV, outdoors, and more. PayIt provides a single resident profile across agencies and jurisdictions, integrates into back-office and adjacent systems, and our team helps clients drive adoption of digital channels. Serving more than 100 million residents in North America, we have received awards from Fast Company and StateScoop, and have been listed in the GovTech 100 for 8 years and counting.



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