

# CLOUD COMPUTING

## A PRIMER FOR JUDGES AND COURT MANAGERS

In the past few years, the court system has had an explosion of interest in cloud computing. Across the nation, court Information Technology (IT) managers are wrestling with policy challenges – should they move IT services to the cloud, and if so, which services, when, and how?

### What is cloud computing?

The cloud is IT infrastructure and software, which is housed, operated, orchestrated, maintained, upgraded, and decommissioned by a cloud provider. However, the cloud’s real power comes in what agencies without traditional “on-premises” operational burdens can do. At its core, the cloud is centered around the same basic operational principles of any modern data center: virtual computing, virtual storage, and network function virtualization, with additional software capabilities available only through a cloud platform. Two fundamental features of cloud computing include a “pay-as-you-go” model and on-demand services where agencies can use as much or as little as needed to accomplish organizational objectives.

At the most basic, “moving to the cloud” might just mean relocating all this computing infrastructure to large, remote data centers managed on behalf of the court by a cloud provider such as Amazon Web Services (AWS), Google Cloud Services, IBM Cloud, or Microsoft Azure.

However, often “moving to the cloud” means a shift to new computing services delivered by software providers who do not even offer an option to run services locally. These are often called “Software as a Service” or “SaaS” applications. With SaaS applications, the computing is done remotely, often by logging in to a website, and the data are stored remotely.

### Some Advantages and Disadvantages of Cloud Computing

Advantages	Disadvantages
<p><b>Flexibility and Scalability</b></p> <ul style="list-style-type: none"> <li>• Can add computing resources when needed without having to obtain capital funding.</li> <li>• Scale advantage allows the provider to deliver sophisticated security, back-up and disaster recovery services very economically.</li> </ul> <p><b>Security, and especially cyber-security</b></p> <ul style="list-style-type: none"> <li>• Many courts struggle today to hire the necessary skills; cloud providers can be more competitive when hiring.</li> </ul> <p><b>Faster Innovation and Development</b></p> <ul style="list-style-type: none"> <li>• Frequent enhancements, often months rather than years.</li> <li>• All customers typically share as a community in the benefits of innovations.</li> </ul>	<p><b>Unrealized Cost Savings</b></p> <ul style="list-style-type: none"> <li>• Costs require careful evaluation.</li> <li>• Some of the vaunted savings should be evaluated carefully.</li> </ul> <p><b>Fostering dependency</b></p> <ul style="list-style-type: none"> <li>• Lose some aspects of operational control.</li> <li>• Reduction of internal IT resources and skills.</li> </ul> <p><b>Less Choice</b></p> <ul style="list-style-type: none"> <li>• Locked in to the SaaS application provider’s way of doing things.</li> <li>• Less choice about when to implement changes.</li> <li>• May not be able to tailor the solution to local requirements.</li> </ul>



## Is the cloud approved for Government agencies?

Yes, in general. In the past few years, attitudes have changed, and key agencies are becoming increasingly open to cloud-based solutions. For example, there is now guidance for CJIS-compliant cloud implementations. Many of the major cloud providers have dedicated facilities for government agencies, sometimes with additional security controls built into the service offer.

## Is the cloud secure?

A better question is, is the cloud likely to be more secure than our existing on-premises services? The answer is generally “yes,” because cloud providers have the resources to hire the best security experts and the scale to invest in the most sophisticated security solutions. In fact, the need to ramp up security is perhaps the major reason your IT function will consider moving to the cloud.

## Further Reading

[IJIS InfoBrief: Cloud Computing and the Courts](#)

[For Courts, Tech Isn't Just a Tool — It's a Message \(govtech.com\)](#)

[2021 Cloud Computing \(americanbar.org\)](#)

[Cloud Fundamentals](#)

[Security, Privacy, and Compliance in the Cloud](#)

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## Acknowledgements

This document is a product of the IJIS Institute; a private, nonprofit collaboration network working to maximize safety, efficiency, and productivity in the public sector by promoting and enabling technology to expand the use of information.

This resource was developed by the [IJIS Courts Advisory Committee](#), a group of dedicated subject matter experts from public, private, nonprofit and academia supporting the court community.

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**Comments and Questions?** They are always welcome!

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