When you utilize Dude Solutions’ Software as a Service (SaaS) applications, your data is hosted in an independently audited data center certified to meet the highest standards of security and reliability. All server and system maintenance issues are quickly addressed for you by Dude Solutions. Your operations management applications and data are managed in a secure, available and high performance environment that would be infeasible for your organization to provide. Advanced technology protects and secures your data and provides you with 99.9% system availability and uptime.

Today’s enterprise application must support 24x7 availability, distributed access and centralized data storage for all users. The reliability and performance of the application, as well as the security of the data, are vitally important. Historically, organizations were required to buy, build and self-host their own applications and infrastructure. The widespread adoption of SaaS in large and small organizations gives you another option. Organizations are increasingly turning to the SaaS model to take advantage of its many benefits – from lower initial costs, and improved access, simpler operational model and continuous transparent upgrades.

**SAAS OR SELF-HOSTED? CONSIDER THESE SAAS ADVANTAGES:**

- Backup Services
- Storage of Backup Data
- Physical Security
- Communication Reliability
- Fire Protection
- Disaster Recovery
- Data Security
- Access to Your Data
- Power Outage Protection
- Hardware Failure Protection
10 Reasons SaaS is Ideal for You

1. **BACKUP SERVICES:**
The frequency and reliability of backup services is critically important because all servers storing data will eventually experience a failure. Dude Solutions performs backups approximately every hour in a highly automated and monitored process, minimizing data loss in the event of a server problem. In typical organizations, backups occur only once per day and are frequently missed for a variety of reasons (employees out of the office, automated processes stopping, competing issues, etc.) Dude Solutions offers far more reliable and frequent data backups.

2. **STORAGE OF BACKUP DATA:**
When data is backed up, it must be properly protected. Ideally, the enterprise would move the backup data to a remote site and place it in a secure facility. Again, our experience is that clients do not take these additional steps. On a daily basis, Dude Solutions moves all backup data to a facility located in another state. This reduces the risk of data loss due to a flood, fire, hurricane or other catastrophe in the primary location.

3. **PHYSICAL SECURITY:**
Security issues can range from vandalism to theft. Most institutions have weak security controls and are accessible to a large number of individuals. Dude Solutions stores your data in a locked down, limited access facility. Only pre-authorized personnel are allowed in the facility, which is secured by a sophisticated, biometric security system. The facility is staffed and monitored 24x7x365.

4. **COMMUNICATION RELIABILITY:**
It doesn’t matter if your data is secure if you cannot access it across your network, intranet or the internet. The fully meshed network used by Dude Solutions has independent fiber connection feeds, ranging from OC-12 to OC-192, for connection to the internet. These connections are provided by separate carriers and utilize dynamic flow control technology to optimize internet access and performance. With this many connections and providers, a loss of several feeds or provider issues does not result in the capacity of the network dropping below required minimums.

5. **FIRE PROTECTION:**
Although your data may be current and stored remotely, a fire could ruin your server hardware and cause an extended outage. Most organizations have limited fire prevention and protective systems. Dude Solutions’ data center utilizes an advanced fire protection system that includes a laser-based VESDA (Very Early Smoke Detection Apparatus) and a sophisticated INERGEN gas system which can stop a fire with minimal or no damage to server hardware. A dual pre-action dry pipe system serves as a secondary means of fire suppression.
6. DISASTER RECOVERY:
Independent of the investments made to protect a single facility, a catastrophic event can still occur. Each of your enterprise applications needs a disaster recovery plan. If not, a catastrophic event could leave your organization waiting an extended period of time for a replacement system to be brought online. Dude Solutions uses a disaster recovery data center to address this issue. Your backup data is stored in another data center (same specifications as described previously) in a geographically separate location. Should a catastrophic event occur, your backup data is readily available to Dude Solutions. Data is replicated on a nightly basis and validated daily. In addition, Dude Solutions conducts disaster recovery drills every three months to verify your data and applications are functioning properly at the disaster recovery site. Our goal is to have your system operational within 24 hours of a primary data center catastrophe.

7. DATA SECURITY:
One of the biggest issues facing any administrator of an enterprise application and its associated data is security. Dude Solutions’ Information Security policies and procedures reduce risks through implementation of controls designed to safeguard the security, availability and confidentiality of client data. Protecting all proprietary information relating to our clients is vital to the Dude Solutions’ mission. Dude Solutions invests in market-leading security technology and leverages industry consultants to provide a secure multi-tiered firewall and intrusion detection system for your data. More importantly, the Dude Solutions network is actively monitored 24x7x365 by security analysts. The security team proactively monitors inbound and outbound network traffic to identify and manage threats to Dude Solutions applications and systems. The Dude Solutions firewall service is tied to a larger grid of firewalls, giving us the ability to proactively detect and block new threats that appear from around the world. All data transmissions over public lines are made using secure, encrypted connections. Personally identifiable data is encrypted at rest. Dude Solutions’ applications utilize password-protected logins and user entitlement access control lists. Industry standards such as ISO 27002 and NIST are used as best practices guidelines for server and system configurations. Dude Solutions’ has adopted security policies and implemented company-wide information security training to protect the privacy of client data. By policy, our employees are prohibited from disclosing information obtained from clients to any other person or entity except in the performance of services for the client.

8. ACCESS TO YOUR DATA:
You own your data, and you want it available 24x7x365. The Dude Solutions system makes your data readily available – all you need is an internet connection! You can run reports at any time and export your data in PDF or XLS format to a location on your in-house network.
9. **POWER OUTAGE PROTECTION:**
A power outage can range from less than a second to several days after a severe weather incident. In a typical self-hosted environment, a power outage takes your system down and also causes you to lose all your data since the last data backup procedure was performed. Power outages create a major productivity loss when they occur. Dude Solutions’ servers are housed in a facility with multiple power failure protections. In the event of a power outage, the data center has an N + 1 battery backup system allowing the servers to stay in continuous, uninterrupted operation. If the power cannot be restored before the battery backup system is exhausted, a coupled system of multiple megawatt generators come online to provide power to the data center. Multiple vendors are on contract to supply diesel fuel to maintain operation of the generator farm until power is restored. Once per week, the generator farm is tested under full load conditions.

10. **HARDWARE FAILURE PROTECTION:**
Sooner or later, all hardware – server, storage or network – will experience a failure. A hardware failure is much less detrimental if you are using a Dude Solutions SaaS application. Dude Solutions maintains a redundant and load-balanced network, server and storage infrastructure. Failover occurs automatically. This means your applications continue to function even in the event of a hardware failure. Typically, your users will not even realize an event has occurred.

**Historical Results:**
Today, you’re probably asking the question, “Should I move my data and applications from self-hosted onsite servers to SaaS?” But within a year, your company will probably be asking you, “Why haven’t you moved our data and applications to a secure, offsite environment?”

As the entire software industry migrates from self-hosted applications to SaaS applications, businesses must go through an evaluation and learning curve on the issues of data storage and management. When you conduct a thorough evaluation – especially if you visit a Dude Solutions data center – we believe you will conclude that the most prudent course of business is to move your enterprise operations management systems to Dude Solutions as quickly as possible.

On-demand solutions reduce your total cost of ownership for these applications by as much as 90% while providing far superior performance.

The results of Dude Solutions’ efforts to protect and secure our clients’ data speak volumes. From 2011 through 2016, Dude Solutions’ servers provided 99.9% average system availability.

The Dude Solutions team has unmatched experience in providing innovative technology to a variety of institutions nationwide. We have built the application services that we know you need, but that you have rarely been able to provide in the past. With Dude Solutions, your facility, business and energy operations management applications are made available from within a secure and reliable environment with support and services from a technology partner who understands your challenges. Our deep experience and client dedication allows us to provide you with unprecedented levels of service and reliability at an affordable price.
Reliability Features

> High performance clustered database servers
> High performance load balanced web server farms
> Fully redundant and high availability host servers throughout
> A fully virtualized environment allows for rapid scalability and recovery
> Redundant high performance 40 GBPS network
> Redundant high performance storage systems – resistant to data loss even with multiple drive failures
> Redundant OC-12 thru OC-192 connections to multiple top tier internet providers
> Redundant data center backup power systems, including multiple megawatt N + 1 generator farm and N + 1 battery backup system
> Server and application monitoring on two-minute intervals
> Daily backups of all system data replicated and restored to a disaster recovery data center
> Quarterly disaster recovery drills
> Hourly backups of appended data (data that has changed)
> 93% of application pages load in less than two seconds, with 99.5% loading in less than six seconds
> Product quality rating of 99.6% or better on average

Security Features

> Physical security monitoring 24x7x365
> IDS/Network security monitoring 24x7x365
> TLS/SSL encryption of all data transmitted over public networks
> AES-256 encryption of all personally identifiable information at rest
> Application security by unique username and password or single sign-on
> Annual security audit by third-party security consultants
> All systems run industry standard antivirus software that is monitored and updated daily
> Patch management process to evaluate, test and apply patches as needed when released by vendors

Privacy of Your Data

> The data you place in our applications belongs to you. We will never share, sell or distribute data that specifically identifies your organization.
> We may offer services that allow you to view “average” or aggregated data from other organizations, but this data will never be specifically identified to you or your organization. Our Privacy Statement and Terms of Use have additional information.
> If you decide to cancel your service, you can take your data with you.
> If you would like a copy of your data, you can run reports at any time and export your data in PDF or XLS format to a location on your in-house network.
ABOUT DUDE SOLUTIONS

Dude Solutions is a leading software-as-a-service (SaaS) provider of operations management solutions to education, government, healthcare, senior living, manufacturing and membership-based organizations. For nearly two decades, Dude Solutions has inspired clients to create better work and better lives. We combine innovative, user-friendly technology with the world’s smartest operations engine, empowering operations leaders to transform the most important places in our lives. Today, more than 10,000 organizations use our award-winning software to manage maintenance, assets, energy, safety, IT, events and more. For more information, visit dudesolutions.com.