

DG LOGIK

IoT Application Platform

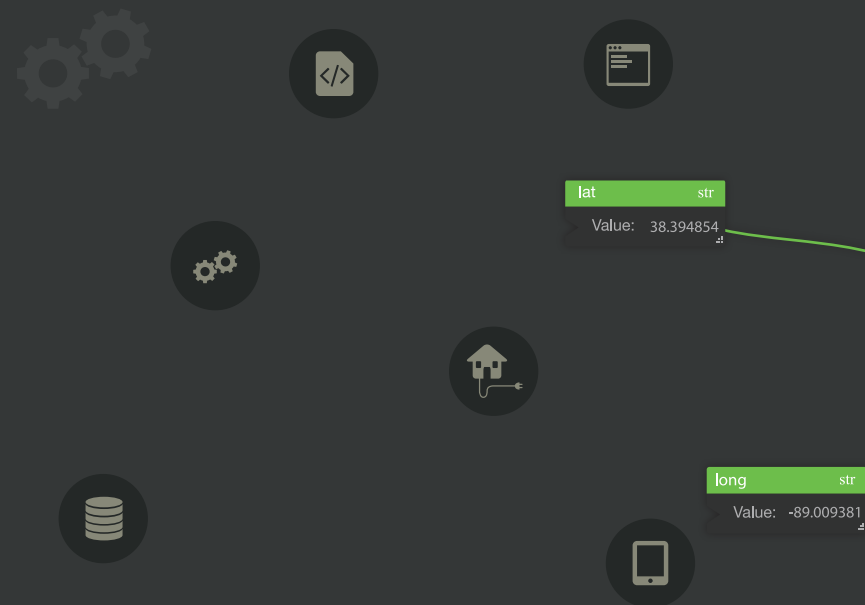


www.DGLogik.com



IoE Application Platform

The Leading IoE Application Platform for Connecting, Building and Deploying Internet of Everything Applications.



www.DGLogik.com | 415.422.9220



Connect Everything

Connect Devices, Services Applications and more with DSA (Distributed Services Architecture).



Build Anything

Build Interactive HTML5 Applications without writing code utilizing DGLux5.



Deploy Anywhere

Deploy your solution anywhere within the IoE Ecosystem; On the Edge, The Fog or The Cloud.

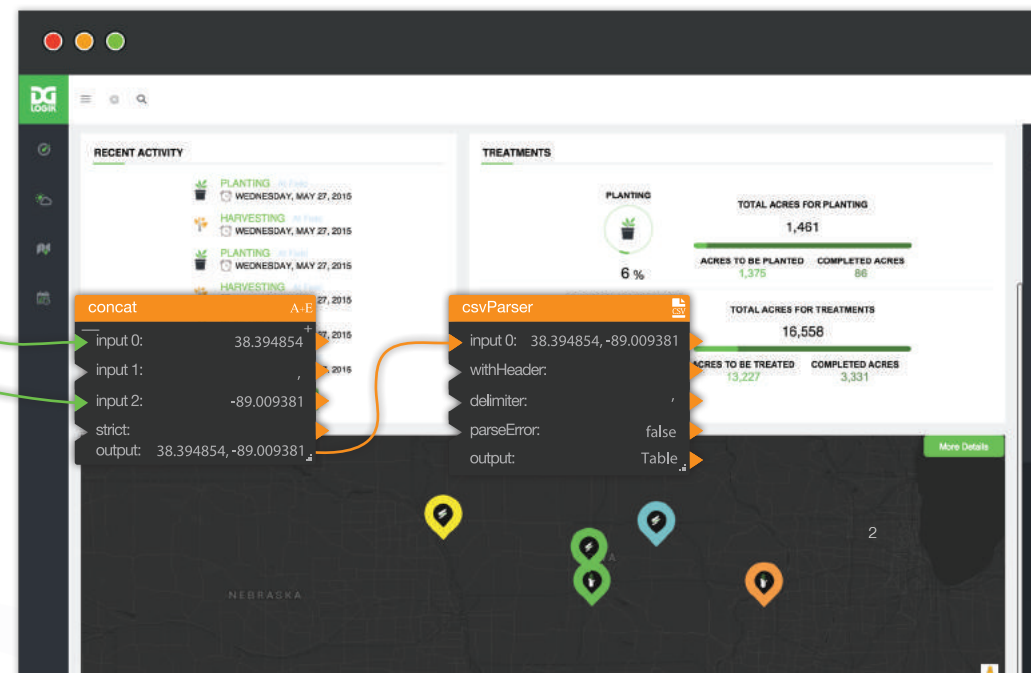




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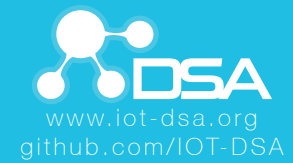
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Connect *Everything*

Devices, Services,
Applications and More.



What is DSA?

Distributed Services Architecture (DSA) is an Open Source Platform & “Toolkit” for Internet Of Things Devices, Services and Applications. The purpose of DSA is to aid the creation of an eco-system where manufacturers, developers and solution providers can contribute and enhance functionality while reducing the risk for customers concerned with business continuity support.

Utilizing a microservices architecture is based upon the requirement to allow design flexibility in order to handle simple as well as complex scenarios, not only providing a reliable data transport, but also the ability to manipulate the data where necessary. Providing the ability to select where logic executes enables flexible designs while optimizing for performance and availability without changing any code.

Core Components of DSA

DSA has three core components; DSBroker, DSLink and nodeAPI. The DSBroker acts as a router for incoming and outgoing streams and the DSLinks that are connected to the DSBroker act as originators of the data streams. The Architecture allows for DSBrokers to connect to other DSBrokers to form a scalable and distributed event stream processing network that mimics neural connections in the human brain. The communication protocol between DSA nodes is facilitated by the nodeAPI which ensures node compatibility and bi-directional control and monitoring ability between connected components.

SDKs Available in Multiple Languages

JAVA
C
Dart
Javascript
Python
C#
Ruby
Scala
more coming soon



DSBroker

A Distributed Services Broker (DSBroker) is a specialized type of node that acts as a data router for messages flowing between nodes. In order to route messages between nodes, the DSBroker implements a publish-subscribe messaging system that provides the following services:

- o Connection management from other nodes (DSLinks and DSBrokers)
- o Guaranteed delivery of messages between all nodes
- o Maintains and advertises meta-data about connected nodes
- o Security enforcement, including authentication and authorization
- o Multi-broker routing for multiple tiered IoE systems
- o Communication styles including remote procedure call (RPC), event streams (e.g. telemetry), continuous data streams (e.g. video) and bulk data movement (e.g. files)
- o DSA Query Language (DSL) support for continuous queries

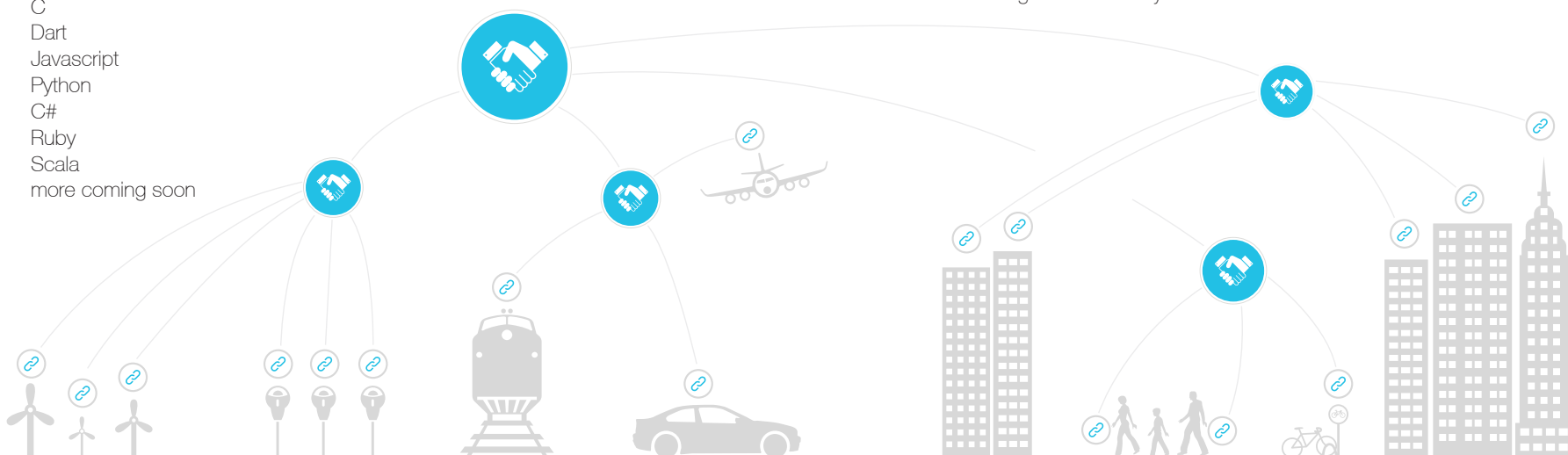


DSLink

A Distributed Services Link (DSLink) is a specialized type of node that is a container for some logic. It always connects to a DSBroker, through which it advertises services, receives and responds to requests, and subscribes to and publishes messages.

nodeAPI

The nodeAPI is the common communication method for all DSA nodes and facilitates all messaging between entities in a standardized manner. The nodeAPI is responsible for traversing node hierarchies, subscribing to values and streams, and invoking actions on any element within the network.





Connect

*To SCADA Systems
Analytics & Databases...*



- Niagara
- WebCtrl
- Skyspark
- Splunk
- Parstream
- Cisco CSA
- Apache Spark
- R
- Oracle
- Cassandra
- HBase
- Elasticsearch
- JDBC
- ETSDB
- MSSQL
- MySQL
- MongoDB
- Postgres
- Amazon Redshift
- and many others



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Connect

*To Devices
& Protocols...*



- Philips Hue
- Nest
- SmartThings
- Raspberry Pi



- iOS
- Android
- Windows 10

- Haystack
- BACnet
- Modbus
- OPC
- KNX

- SNMP
- EnOcean
- ZWave
- Zigbee
- MQTT

- REST
- BLE
- Thread
- Homekit
- and many others





Connect

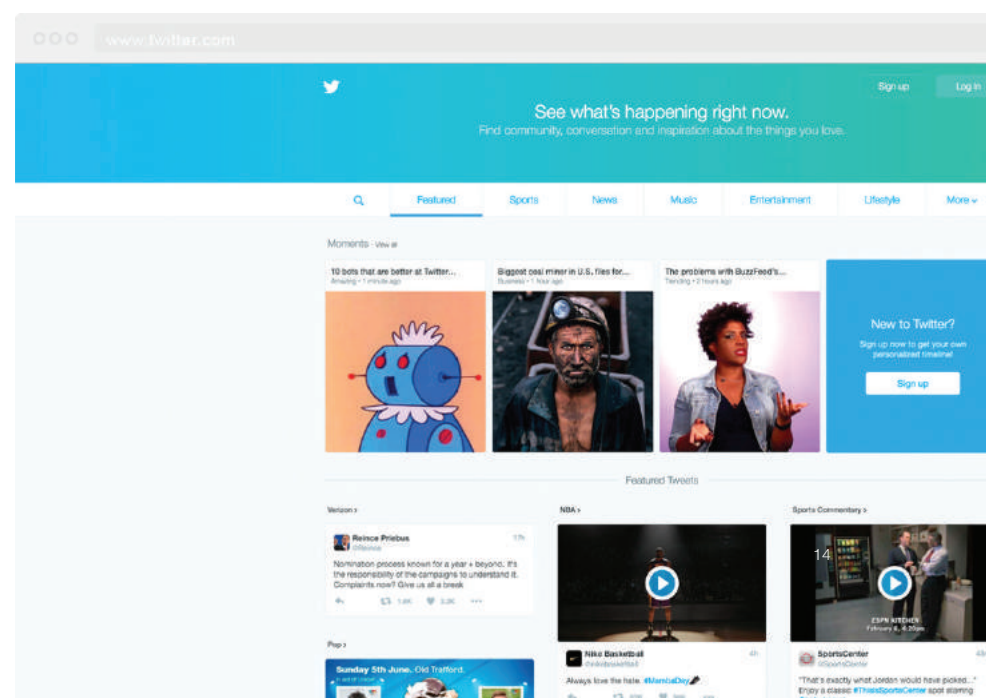
*To Services
& Applications...*



- Facebook
- Twitter
- Google+
- LinkedIn
- YouTube
- Google Analytics
- Salesforce
- Slack
- Yahoo Weather
- Radian6 Social Studio
- and many others



YouTube



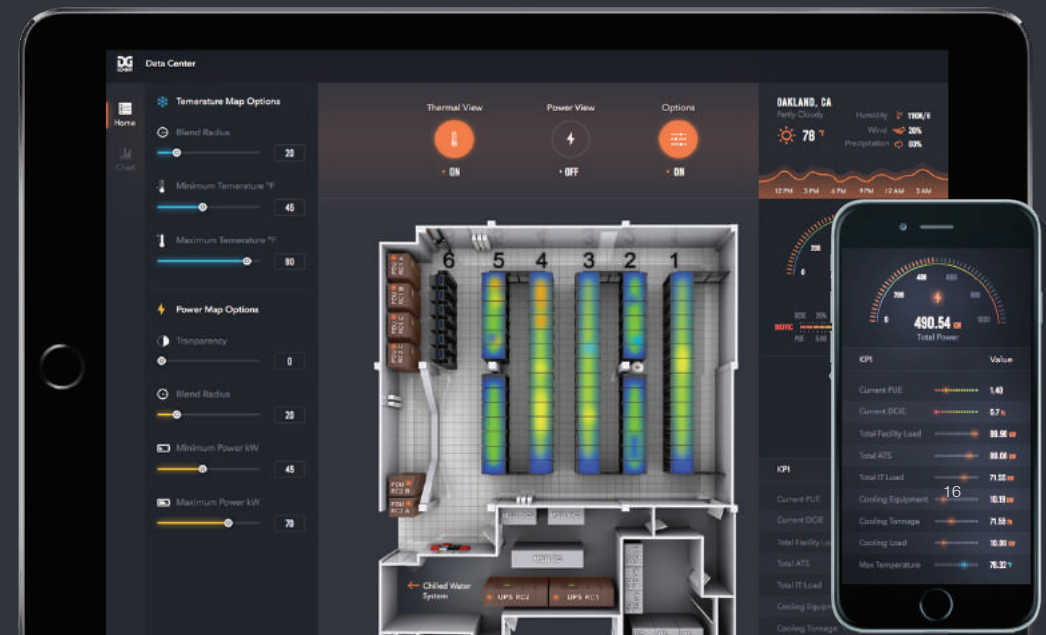


Build *Anything*

Interactive HTML5 Applications
without writing code.

DGLUX₅
www.DGLux.com

Build





DGLux5 maximizes analysis efficiency and enables faster communication through real-time, data-driven dashboards for web, desktop and mobile devices. Significantly reduce time and money in project design, creation and deployment with a modern platform that everybody loves, DGLux5.

- Build Visually Stunning Interfaces & Dashboards Without Writing A Single Line Of Code
- Significantly Reduce Time & Money In Project Design, Creation And Deployment
- Analyze, Monitor And Control Device Data And Analytics Systems In Real Time With The Most Cutting Edge Visualization Platform
- Run Your IoT Applications On Any Mobile Smart Device, Kiosk, Digital Signage, Computer Or Mobile Device With Automatic Scaling To Fit Any Resolution
- Enhance Your Analysis, Monitoring, Troubleshooting, Load Shedding, Property Management, And Cost Comparison



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The “drag & drop” rapid application development and visualization platform that enables individuals and teams to design real-time, data-driven HTML5 applications and dashboards without ever writing a single line of code.





Link Multiple Data Providers

Gain access to all your data sources in a single, unified workspace. Derive information from any database, device, social media platform, etc.



Control & Command Data

Revolutionizing the way we build applications through visual programming, DGLux provides the tools for controlling & commanding your data!



Client-Side Technology

DGLux5 is fully HTML5 and runs in the browser. It does not tax the CPU of your server and saves resources for your server to focus on collecting and analyzing data.



Mobile Responsive

Intelligent scaling with responsive layout in DGLux5 ensures that every user interface is automatically optimized for any screen size to ensure optimal viewer experience on any modern device.



Set Mouse Gestures

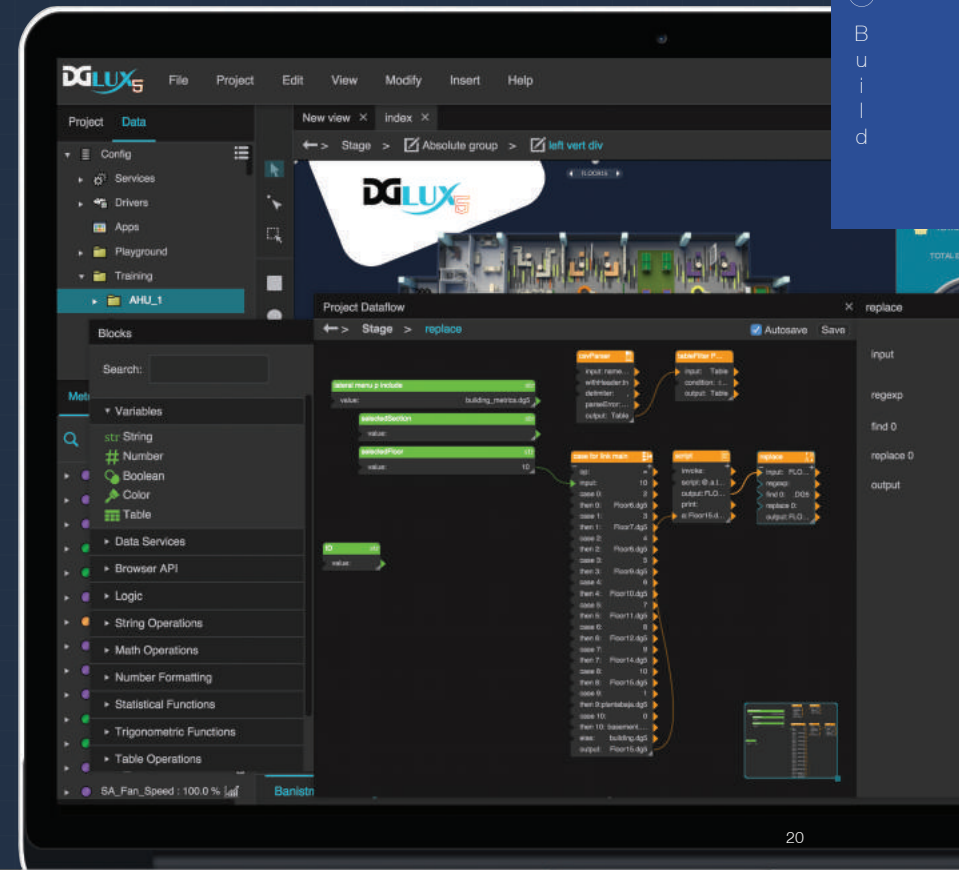
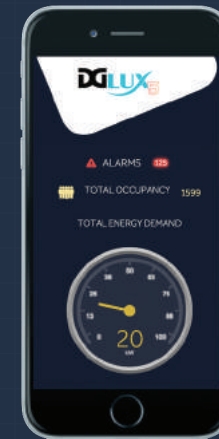
To build interactive applications, DGLux allows you to add behaviors to any objects interaction a user can make such as click, double click, roll over, rollover & out, mouse down, mouse up, click on, click off, load complete or custom triggers for a mix of interactions.



Set Touch Screen Gestures

DGLux enables you to build interactive mobile applications with support for all touch screen gestures such as swipe, rotate, pinch, spread, two finger tap and scroll.

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Build





Visual Programming Technology

Create logic sequences within our advanced, visual programming User Interface...without having to write any script!



Create Personalized Interaction

Create personalized interaction by adding behaviors to any object using the "Record State" feature which allows you to change parameters and automatically save the recorded changes as behaviors. This enables you to execute commands through any possible user interaction, creating unique, sophisticated interfaces and experiences.



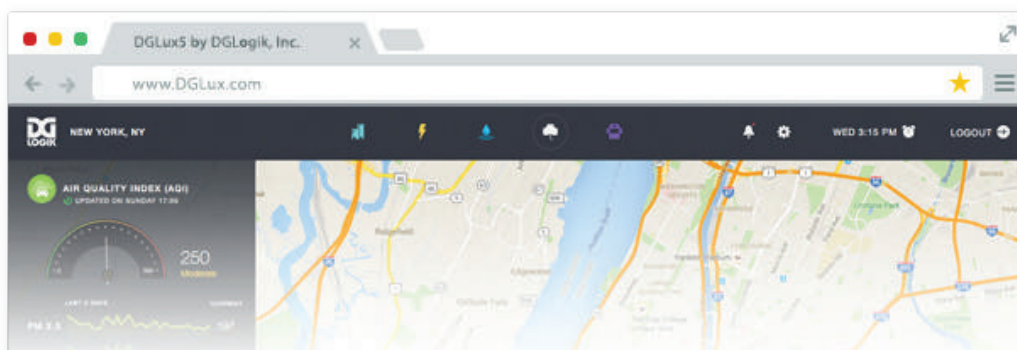
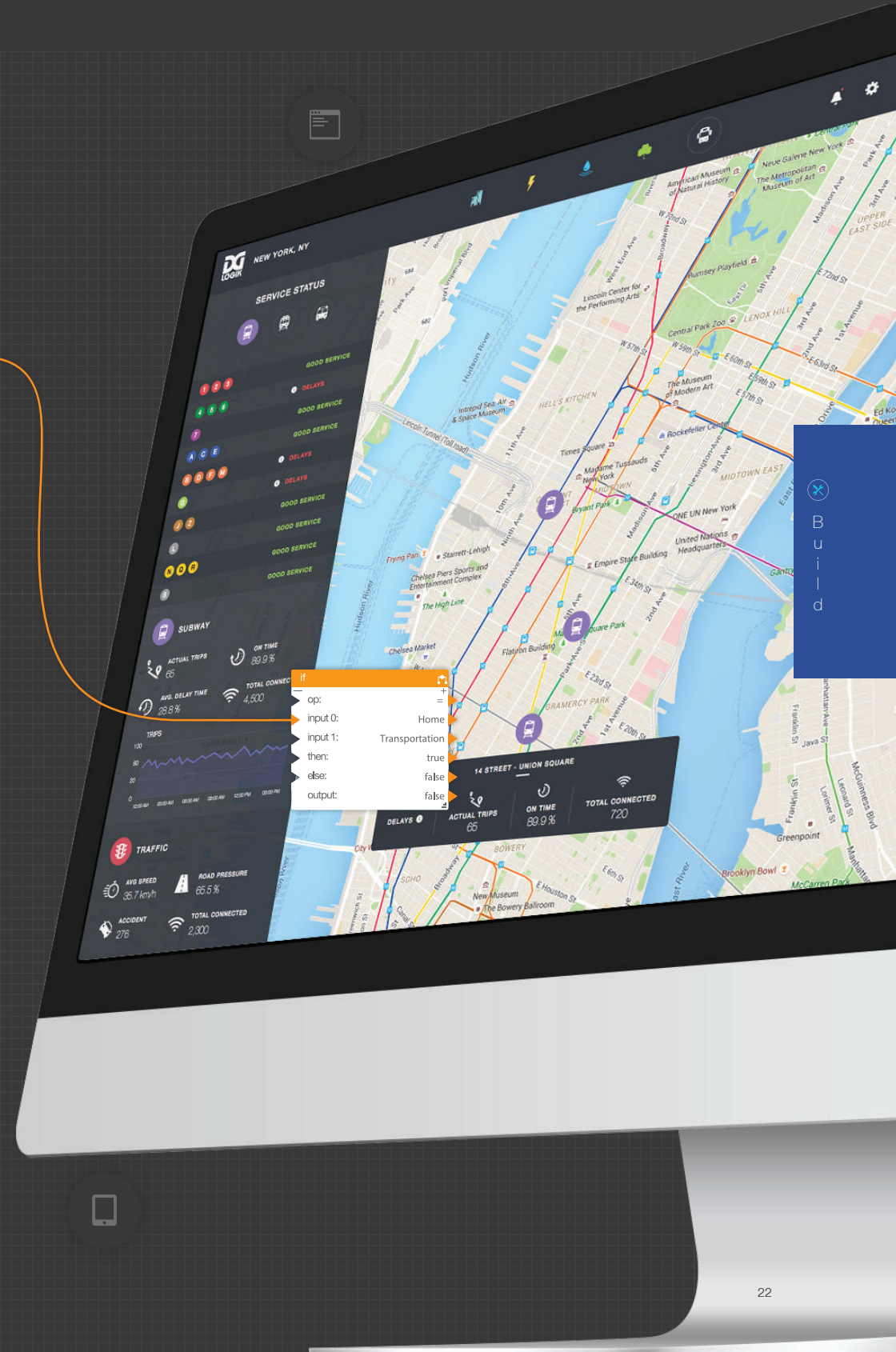
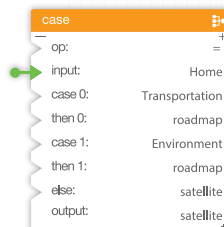
Customize Charts & Graphs

To display your data, DGLux offers many different customizable column charts, bar charts, line charts, area charts, pie charts, radar charts, dynamic charts, and scatter charts to best represent your systems.



Stunning Graphics Library & Widgets

You aren't starting from scratch. DGLux provides graphical assets to get you started such as assorted animated widgets, background themes, patterns, effects, 3D equipment, assorted icons, glass effects and much more!





Deploy *Anywhere*

On the Edge, The Fog or
The Cloud.



Cloud Deployment

Cloud Hosted Solution

As the popularity of cloud computing grows, DGLux architecture is flexible enough to accommodate a hosted solution where DGLux can reside in the cloud and access data on any other server or device.



Fog Deployment

Private Data Centers

In an environment where you have a significant data set and need to keep all data and software on-premise, DGLux can be deployed on any server that you have onsite. You have full control of the deployment architecture.



Edge Deployment

Embedded Devices

DGLux can reside on any embedded device such as a gateway or controller -- Raspberry Pi, Beaglebone Black, DELL Edge Gateway, and much more. The core DGLux platform requires 4Mb of space.

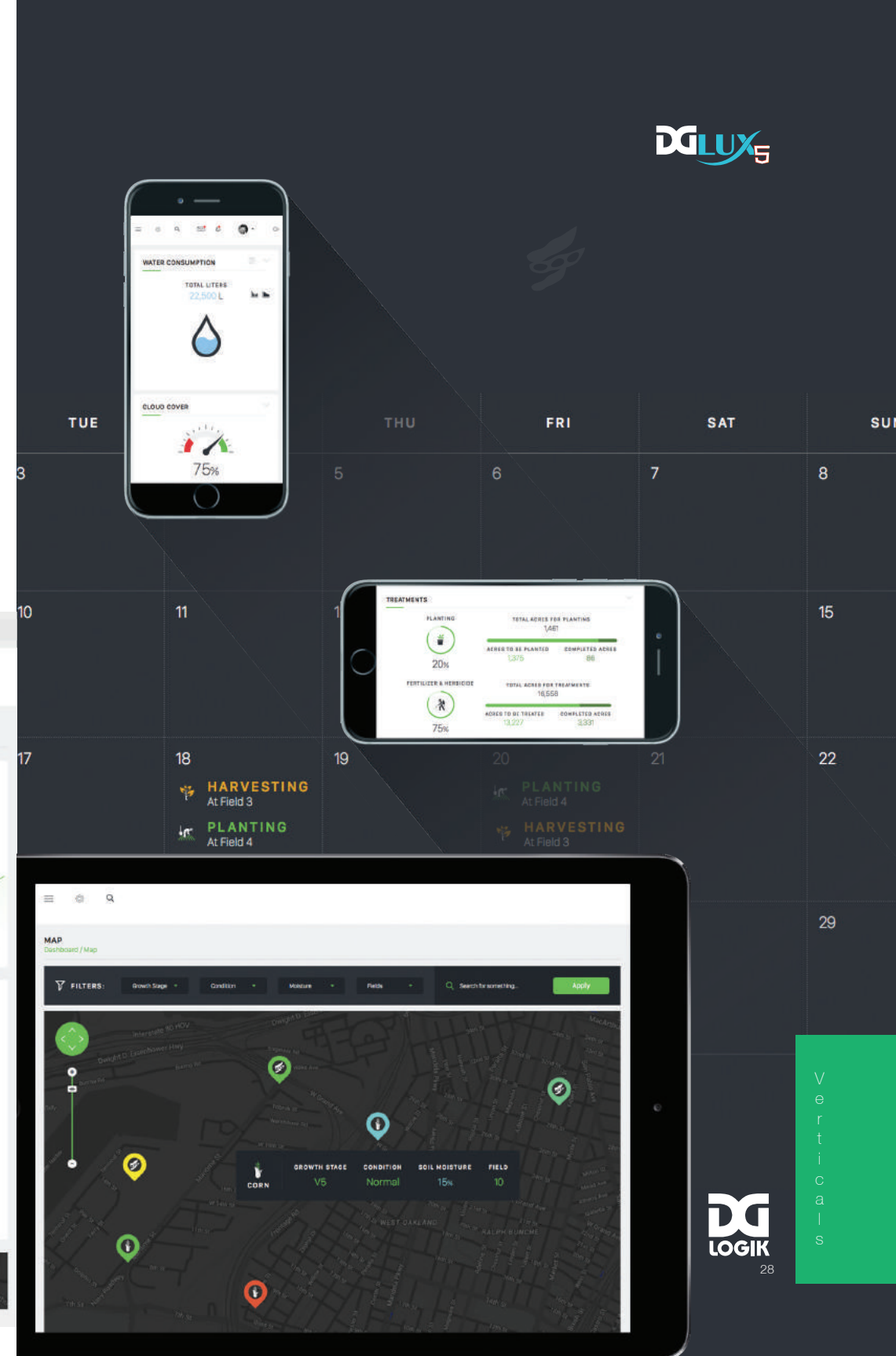
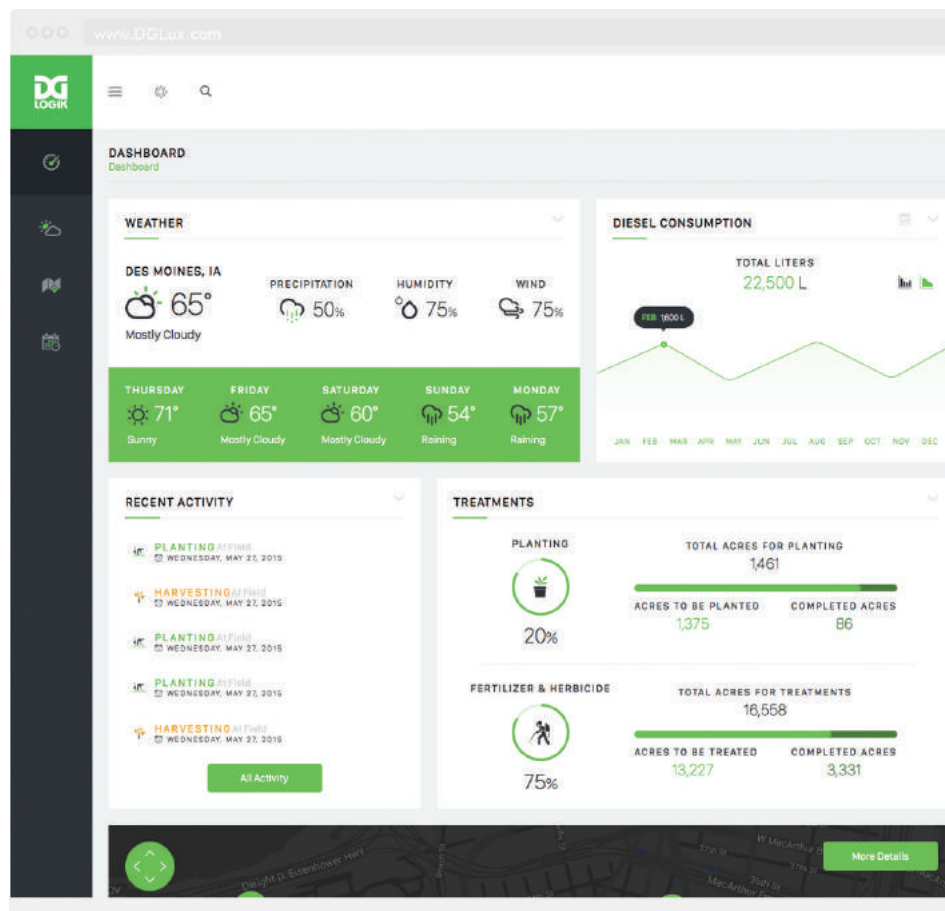


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Smart Agriculture

Valuable, yet often overlooked is the assessment of conservation and energy methods and technologies to accurately analyze and improve farming productivity. The dependency of vast amounts of natural resources, like water and fertilizer and the importance of decreasing waste, in operations within the agriculture sector makes it apparent to implement new methodologies and innovative technologies to easily manage and monitor equipment and facilitate production processes.

DGLux5 may help farmers, agronomists and production teams to evaluate the most relevant data gathered from systems and sensors, field and plant equipment to streamline conservation efforts and even automate machines for optimal performance to increase crop yields and farm production.

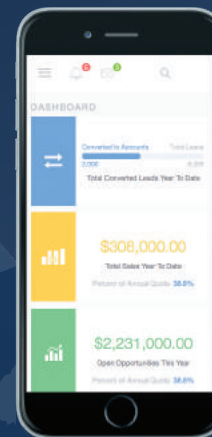


Increasing Business Intelligence Value

Monitoring and evaluating job performance, productivity and ROI within a business can be difficult to measure. It can become monotonous and time consuming for several employees -- scheduling several office meetings, completing various performance reviews, and reviewing excel spreadsheet after excel spreadsheet.

However, having a custom application that displays meaningful analytics and reports with DGLux5, to consolidate, schedule and facilitate tasks and performance may significantly increase ROI and allow companies, executives, managers, marketing and sales professionals become more resourceful.

Combine your business systems and business data to become more efficient and more profitable.



DGLUX5

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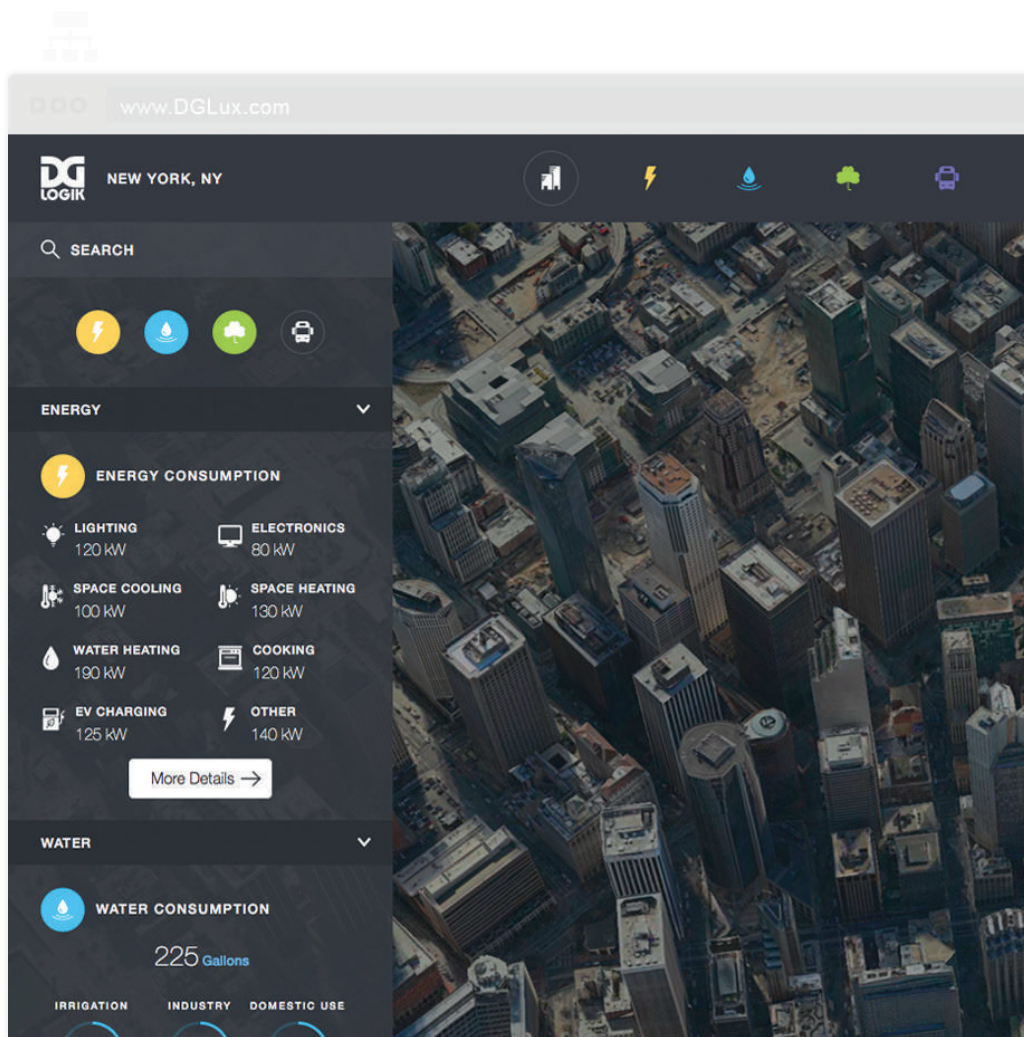
Verticals

Making Cities Smarter

Globally, cities and infrastructures are rapidly evolving. And implementing “green” methodologies, services, applications, and smart infrastructures to cut costs, increase operational efficiencies and sustainabilities continues to be a high expectation. However, navigating through these various platforms and databases to make well-informed decisions may be tedious and very time consuming.

Unifying all city, building and energy management systems and data can be achieved with the leading technology, DGLux5. It provides a combined innovative design and development platform which allows any user to easily create custom city and smart infrastructure monitoring applications and dashboards to intelligently analyze data, make intelligent decisions and become more profitable.

Take immediate action with DGLux5 and improve city operations to see the impact of your actions on overall resources.



Data Visibility Increases Industrial Visibility

In the industrial and factory vertical, implementing necessary technology to monitor your shop-floor data and systems gives executives, manufacturers and floor managers key insights that can minimize factory anomalies, increase production rates in less time and improve overall factory processes.

With DGLux5, one has easy capability of creating real-time visibility into all assets whether it's shop-floor, machines or production lines. Key insights like overall equipment effectiveness (OEE) and total effective equipment performance allows one to truly understand machine uptime and downtime, validating whether it is the machine performance or manufacturing processes that needs to improve. Increase your industrial and factory visibility with DGLux5.

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DGLux5



Verticals

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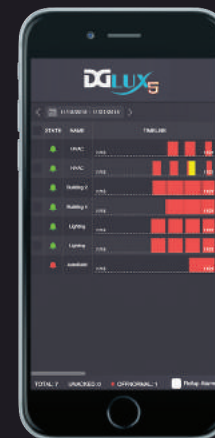
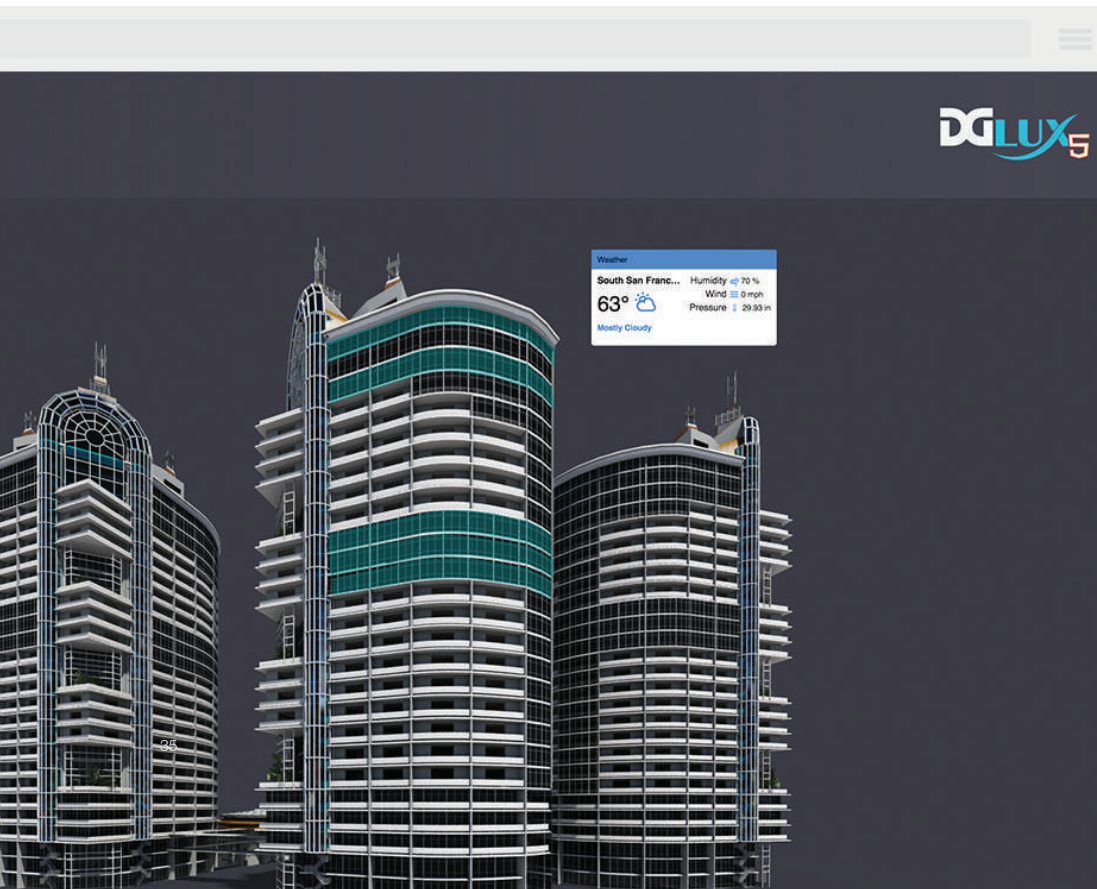
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Powering Intelligent Buildings

Executives, engineers, building operators and management need modern building technology and data visualization tools in order to properly utilize building systems data as an asset. Being able to connect building systems data into a single, unified platform including HVAC, lighting, security, fire safety, and work order management systems is the leading building automation solution, DGLux5. It is your companion in increasing operational efficiency and decreasing issue resolution timeframes. With DGLux5, one can easily analyze mechanical and electrical systems, monitor emergency situations, troubleshoot hot/cold calls and perform preventative maintenance and much, much more.

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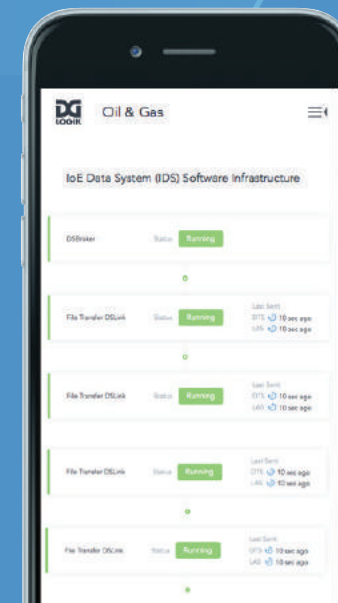
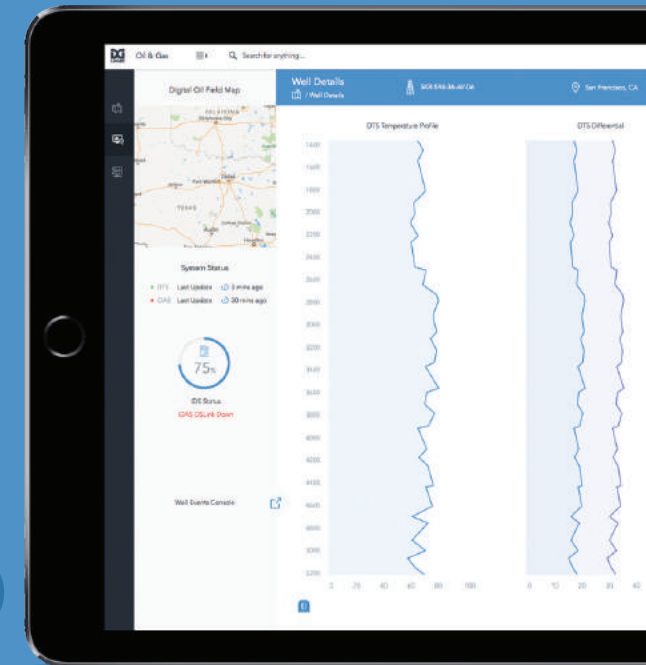
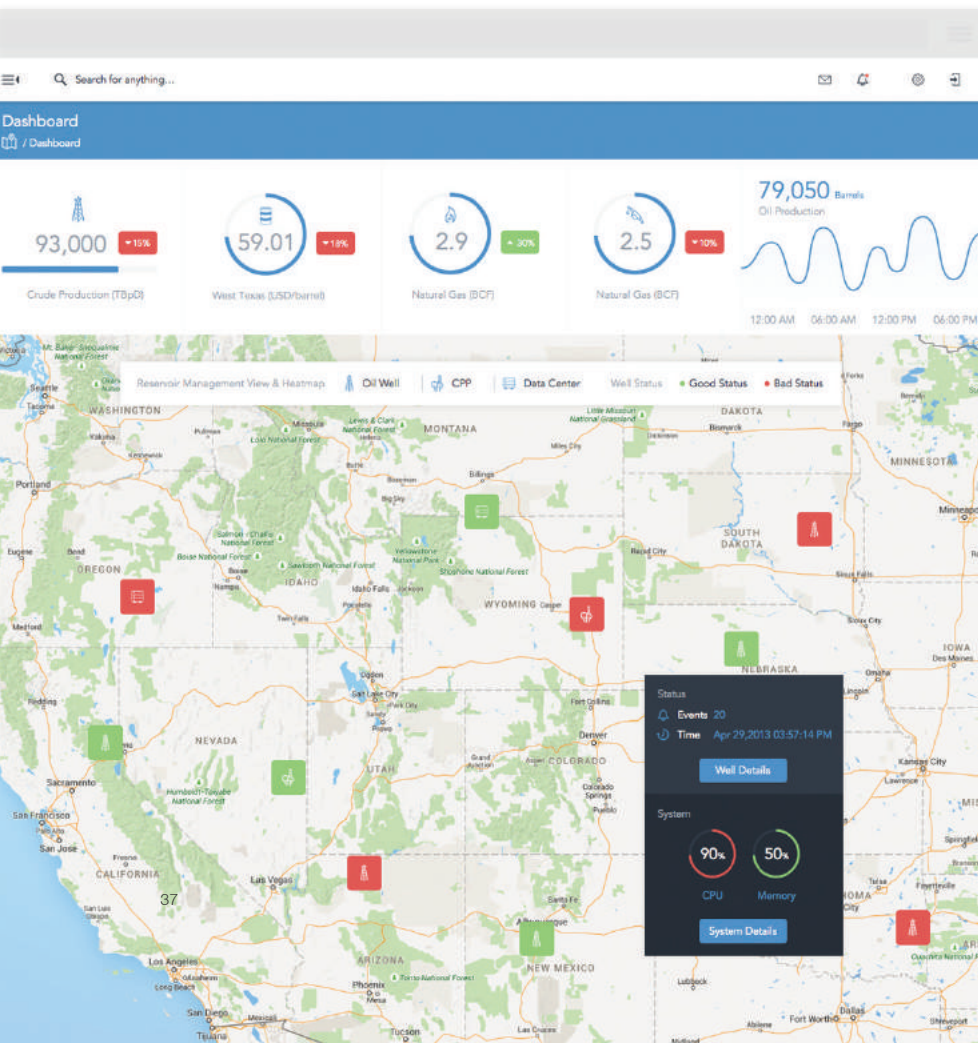
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Smart Technology for Oil & Gas

In oil and gas industry, safety, stable infrastructure, and reliable information is paramount. Like never before, oil and gas enterprises are facing the problem of very big data rapidly accumulating in their data servers. Therefore, the necessity for solutions capable of analyzing large amounts of data and extracting the most accurate real-time figures is especially strong.

The advanced and flexible features of DGLux5 enable oil & gas producers and suppliers to address these issues – monitor and control the data centers and physical factors affecting the oil rig site operations. With intuitive applications created on DGLux5 platform, decision-makers can monitor and manage oversized data storage infrastructure, track logistics, as well as set triggers and alarms ensuring safety and efficiency.



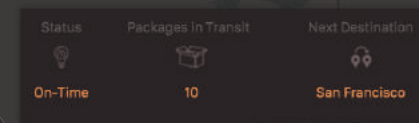
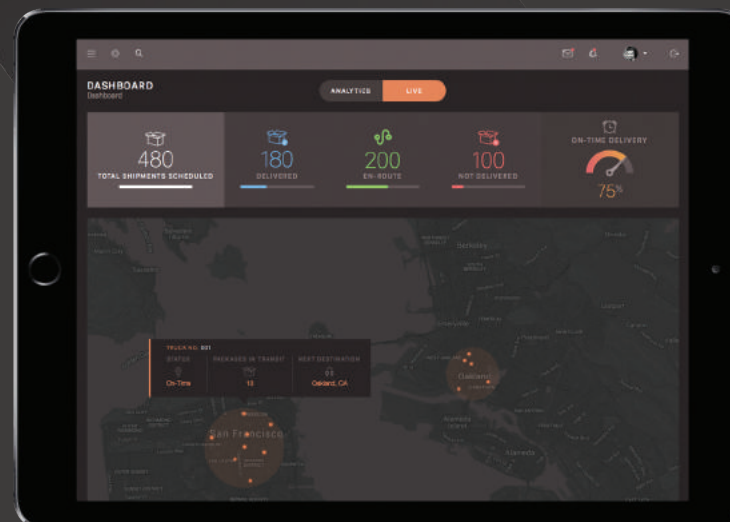
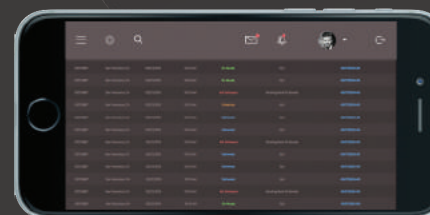
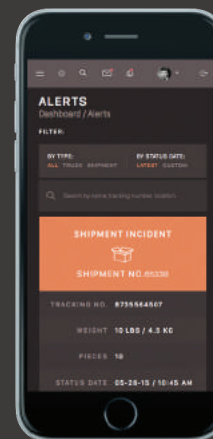
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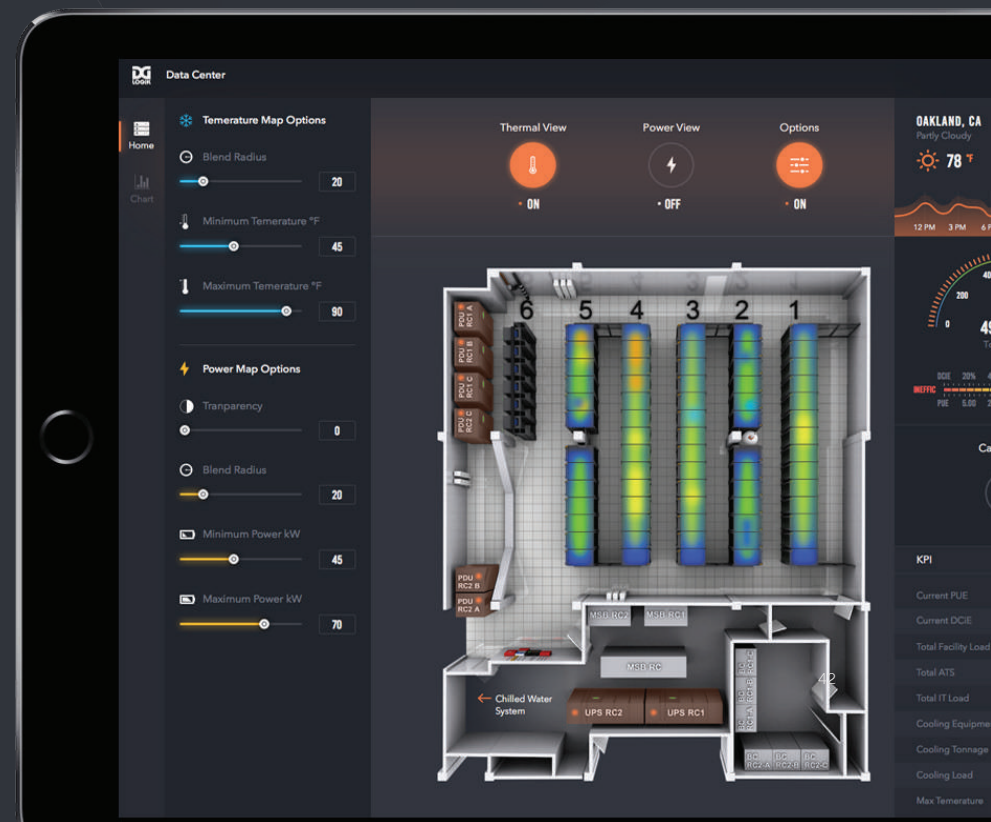


Gain Full Visibility Into Transportation & Logistics

Whether a delivery service company, supply manufacturer or distributor, easily managing and monitoring your productivity and equipment's efficiencies can be easy with DGLux5 technology.

DGLux5 transportation logistics & analytics solutions offers unified, flexible integration and data visualization usability among your intelligent transportation and manufacturing systems in order to discover or predict anomalies, gain full visibility into supply chain dynamics, manufacturing and transportation expenses, and communicate better with customers and suppliers.







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