



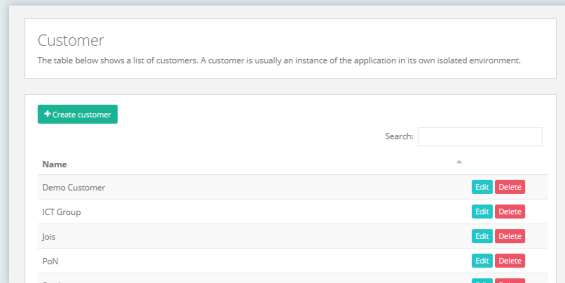
conNXT 1.0
Feature List

12/13/2017

conNXT Portal platform

Your application will be built using the conNXT Portal platform. This platform allows us to create applications faster, with higher quality and more functionality and of course cheaper.

Below you will find a number of functions of the conNXT Portal platform which we have already built for you. The first version of your application with conNXT can therefore be ready in a matter of days.

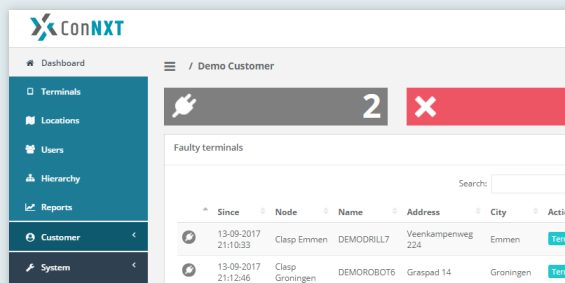
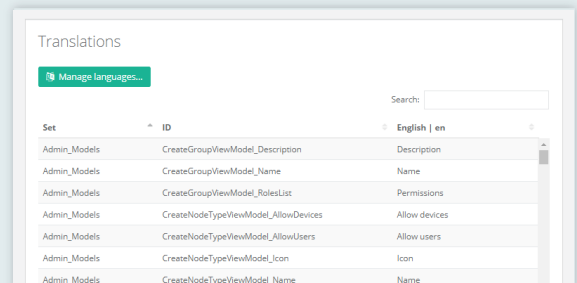


Multitenancy

Within your application different customers can have their own environment so that they cannot see each other's data. A logged in employee sees only the data of his own company.

Multilanguage

Different users see the application in their own language. The translations can be changed online, so you can choose to do the translation yourself, or for example by the distributor in the country. Of course, we can also do this for you.

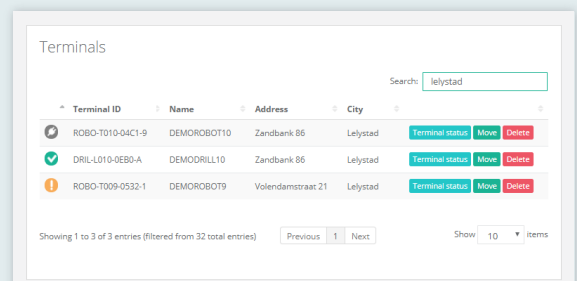


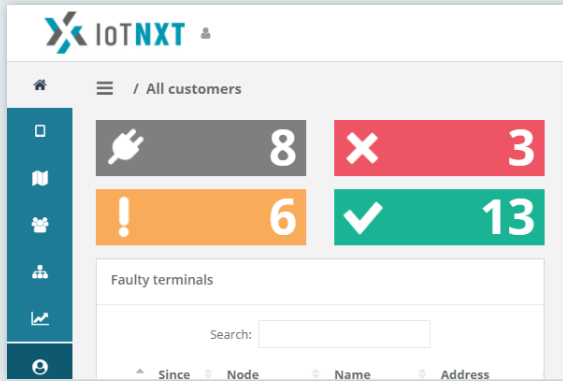
Branding

You can let our team take care of the styling of your application in a modern look and feel, but you can also completely align its styling with your own vision or current identity. It is also possible to use the branding of your customers, using a color, logo and customer name. This styling can also be used for e-mails sent by your application.

Search and filter

You can filter and sort all tables in your conNXT Portal.



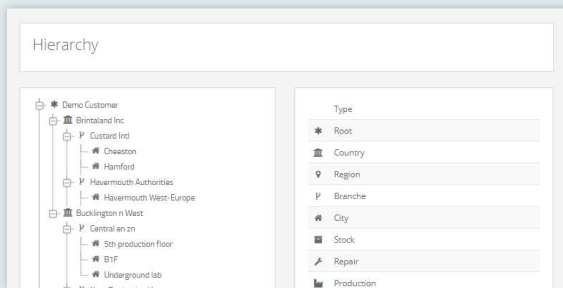


Responsive design

Applications are not only used on PCs, but users want to use it also on tablets and smartphones. CONNXT Portals take different screen sizes into account so this is easy to achieve.

Security

Data and infrastructure is essential for the survival of your business. You can therefore rely on ICT Group to use the latest security measures when building your application. This means your data is secure in our cloud.

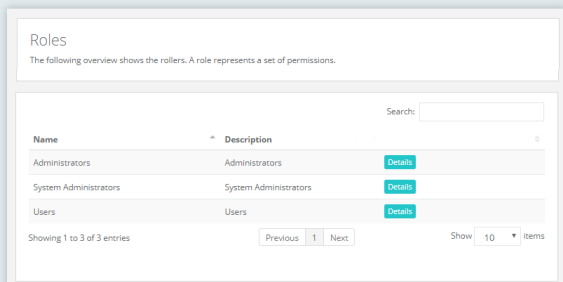
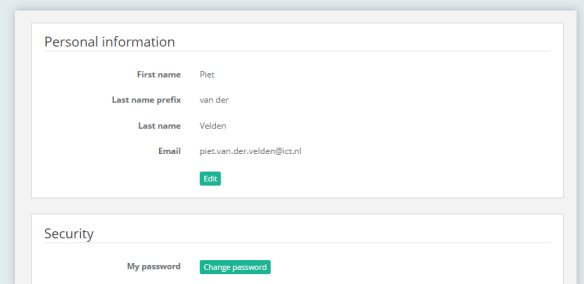


Hierarchy

You can apply a hierarchy in the application. This allows you to group users and devices from regions, companies or projects together. Administrators can always see only the data corresponding to their own place in the hierarchy.

User management

Most applications require user management. This is why it is part of CONNXT. You can create and modify users per customer and users can change or recover passwords. If desired, users can also create an account or you can use multifactor authentication providing extra security via SMS login.



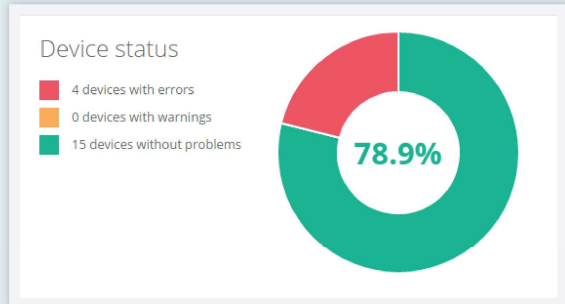
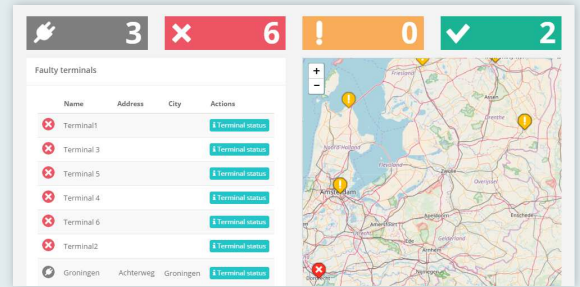
Rolls and user rights

For your application, our team can define roles that give users more or fewer rights. What rights should be available per roll is defined together with you.

Dashboards

On a dashboard, you can quickly see the state of the devices in the field. From the dashboard, you can click through to the detailed status of a device to diagnose a problem.

Also for other data we can create different types of dashboards that show the KPI's for your application.



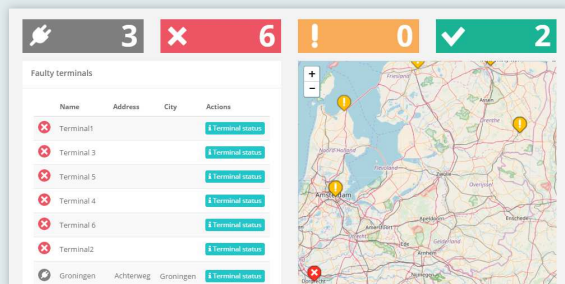
Reporting

You can export each list in your application, as CSV, Excel or PDF file.

We can add additional reports for you or possibly at fixed times send reports by e-mail to your customers or users.

Business Intelligence

A cloud application is not complete without the ability to use your data to gain new insights, for example to discover or develop new services or markets. ICT Group can provide you with the tools to gain these insights.

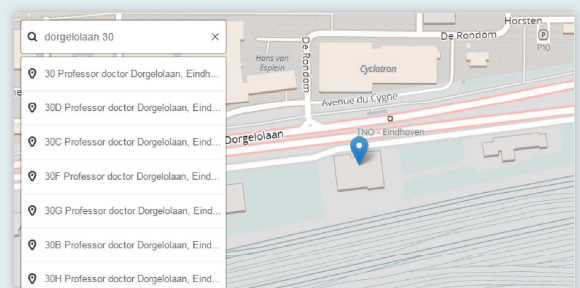


Maps and GPS locations

In many applications, it is relevant to know where organizations, customers or devices are located. In the CONNEXT Portal platform maps and GPS locations are directly available for your applications. Of course, this also includes the autocompletion of addresses and the retrieval of GPS locations for these addresses.

Autocompletion of addresses

It is often difficult in an application to consistently and correctly input addresses. Therefore, within the CONNEXT platform, autocompletion of addresses is already built-in to ensure the correct data. At the same time the GPS location is stored so that it is shown correctly on the dashboard.





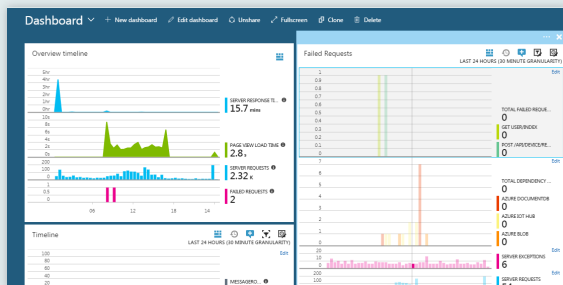
E-mail

In many applications, e-mails are sent. This happens, among other things, for activating user accounts, but also when recovering a password. In addition, we can send e-mails in other situations.

Naturally, your e-mails are formatted so that your application gets a professional modern look.

SMS

In addition to e-mail, we can also send SMS from your application. This is used, among other things, for multifactor authentication, but can also be used in your own scenarios.



Support and monitoring

Of course, we not only provide a warranty on our work, but we also ensure that your cloud continues to function. Therefore, for every application, monitoring is built in so that we automatically get updated if there is a problem, but usually even before the problem arises. ICT provides long-term support for every application. You can of course choose which SLA is best suited for your application. If you want support during office hours or just 24/7, this is all possible.

conNXT Device Management

Based on the Microsoft IoT Suite, our platform delivers a number of extensions that make it easy and fast to have your own IoT Cloud application. **conNXT** Device management is built in our **conNXT** Portal platform.



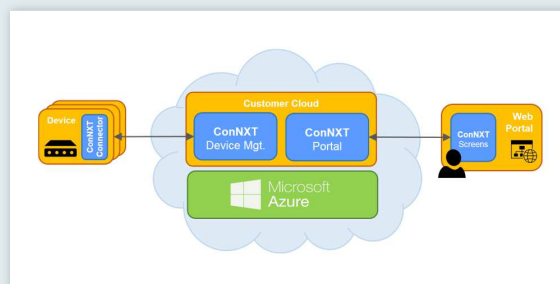
Azure IoT Suite

conNXT is based on the Microsoft Azure IoT Suite solution. This is the most advanced cloud platform in the market today. Scalability and security are built in from day one. This is the right choice for large numbers and applications.

Microsoft Azure is the fastest growing cloud solution that enables us to quickly deploy your application worldwide.

The ConNXT Connector

You can connect your devices to the cloud by integrating the **conNXT** Connector. This library can be integrated by your own developers, or possibly by the ICT Group, into the software of your machines and devices. The **conNXT** Connector delivers standard messaging, two-way communication, status and information handling, configuration, security, etc.



The screenshot shows a web interface for a 'Demo Customer'. It has a sidebar with a menu icon and a 'Terminals' section. The main area displays a table of terminals with columns for Node, Terminal ID, Name, and Address. Each row has a status icon (green checkmark or red X) in the Node column.

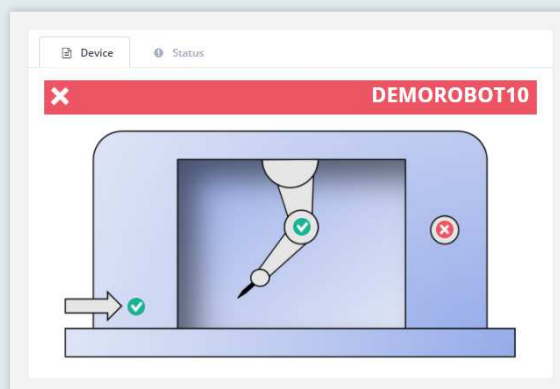
Node	Terminal ID	Name	Address
Clasp Groningen	ROBO-T006-0501-E	DEMOROBOT6	Graspe
Clasp Emmen	DRIL-L007-0F01-0	DEMORILL7	Veenku
Cheeston Amsterdam	ROBO-T001-04B1-9	DEMOROBOT1	Kerkstr
Hamford Dordrecht	DRIL-L004-0ED0-0	DEMORILL4	Campa
Clasp Groningen	DRIL-L006-0EP0-F	DEMORILL6	Graspe
Lab-Lokland	DRIL-L010-0C00-A	DEMORILL10	Trooth

Device management

You can enter your devices into your cloud application. You can then configure and monitor them via the application. On the dashboard, you can see if devices are offline or have an error situation.

Device types and images

Within **conNXT** you can define multiple device types and add device images. The device images show the status of the device overlayed on top of it.



Configuration

Terminal ID: ROBO-T001-0481-9

Name: DEMOROBOT1

Technical config: Type 7210

Version 5 (Published)

Functional config: Select

Save Cancel

Device configuration

You can configure your devices from the cloud. You can keep your own configuration syntax but distribute the configuration files via the cloud. By default, there are two types of configurations, technical and functional. However, the configuration mechanism can be used for other types of configuration as well.

Device monitoring

You can monitor your devices from the cloud. At a glance, you'll see where there are problems, but you can of course also receive any possible problems by e-mail. If you see a problem, you can see the status, history, and logging in the cloud application to diagnose the problem.

3 6 0 2

Faulty terminals

Name	Address	City	Actions
Terminal1			Terminal status
Terminal 3			Terminal status
Terminal 5			Terminal status
Terminal 4			Terminal status
Terminal 6			Terminal status
Terminal2			Terminal status
Groningen	Achterweg	Groningen	Terminal status

Messages History

Show 10 Items Search

Timestamp	Subsystem	Message	Parameters	Actions
13-09-2017 21:20:06	IoTConnector	DeviceStarted		Show details
13-09-2017 21:20:06	Device	DeviceInfo		Show details
13-09-2017 21:20:05	DEMOROBOT	ItemProduced	row1 = Test=OK,	Show details
13-09-2017 21:18:27	Device	Status		Show details
13-09-2017 21:17:31	DEMOROBOT	ItemProduced	row1 = Test=OK,	Show details
13-09-2017 21:16:41	DEMOROBOT	ItemProduced	row1 = Test=OK,	Show details
13-09-2017 21:15:51	DEMOROBOT	ItemProduced	row1 = Test=OK,	Show details

Message history

In order to diagnose possible problems, you can view the message history of the device or machine in CONNEXT.

Status history

Also, the history of the device or machine status is shown in CONNEXT. This way you can see if a problem has occurred before.

Messages History

Show 10 Items Search

Start time	End time	State	Actions
13-09-2017 21:20:11	-	✓	Show details
13-09-2017 21:18:29	13-09-2017 21:20:09	✗	Show details
13-09-2017 21:12:39	13-09-2017 21:18:28	!	Show details
13-09-2017 20:58:39	13-09-2017 21:12:38	✓	Show details
13-09-2017 20:57:51	13-09-2017 20:58:39	✗	Show details
13-09-2017 20:57:00	13-09-2017 20:57:50	✓	Show details
13-09-2017 20:56:34	13-09-2017 20:56:59	✗	Show details

Message info

Subsystem Information

- ✗ Robot Robot - Blocked
- ✓ Safety
- ✓ Transport

Actions

Reboot terminal

Retrieve terminal log

Details

Edit

Configuration

Register terminal

Power off terminal

Delete terminal

Direct methods

You can send your devices commands from the CONNEXT Portal platform. Restart in case of a problem or take another action, simply and quickly, with one press of the button. A possible device response can be displayed directly in the browser.

References

conNXT is actively being used in several customer projects, please contact us for references.

Contact information

For more information on conNXT, or a demonstration, please contact us.

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