

# La Communication industrielle et Industrie 4.0

## HMS Industrial Networks

**ALAOUI Toufik**

Area Sales Manager Embedded Solution

mta@hms.se

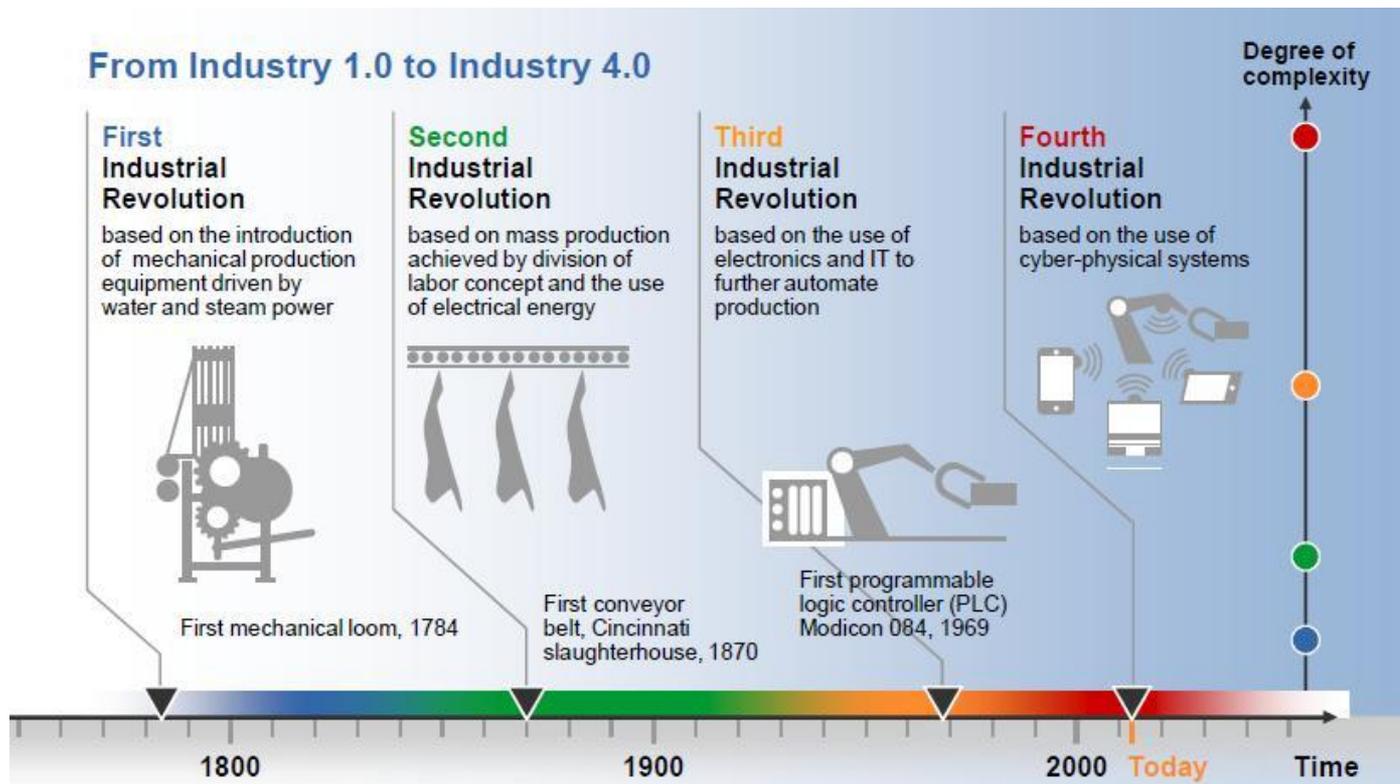




# Introduction

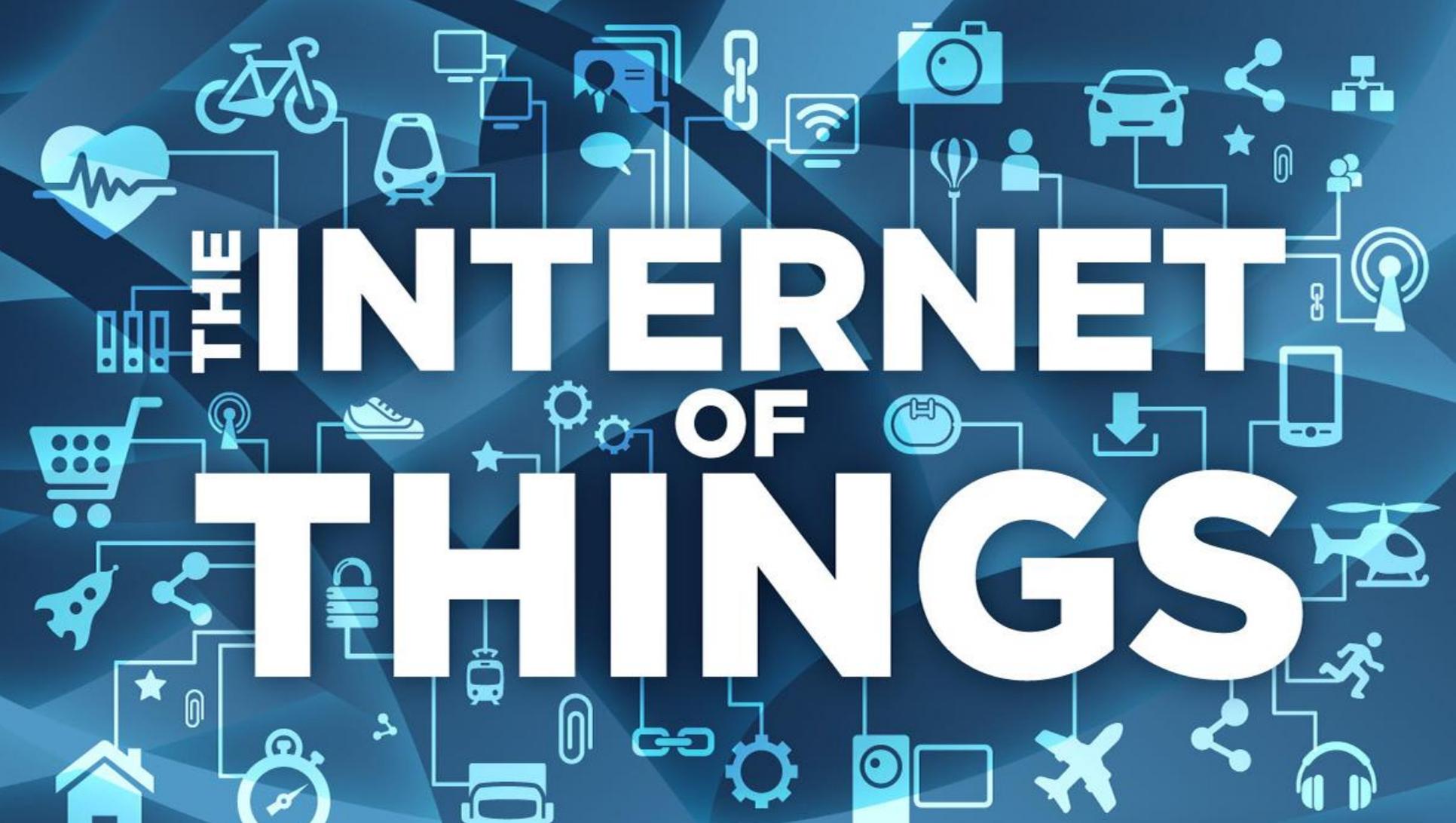


## Qu'est-ce que l'industrie 4.0?



- Qu'est ce que l'industrie 4.0?
  - Numérisation de l'usine
  - Personnalisation de la production et flexibilité de l'usine
  - Une usine économe en énergie et en matières premières





# THE INTERNET OF THINGS

## Un lien entre deux mondes

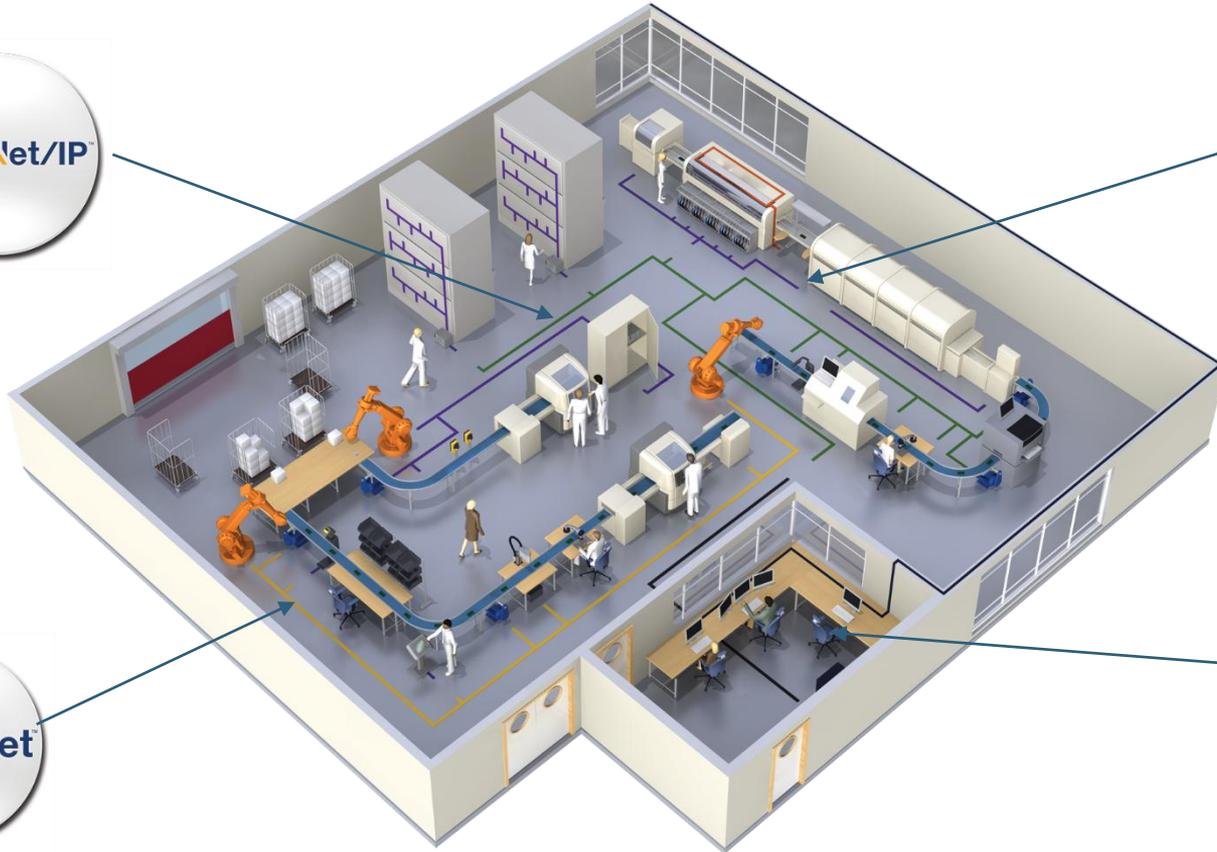
### Information Technology (IT)

- *Business Management*
- *Cloud applications*
- *REST API's*
- *Object oriented data*
- *Meta tagged data*
- *Pushed / streamed data*
- *Data management services*
  - *Data filtering*
  - *Data analysis*
  - *Data integration*
  - *Reports*



### Operations Technology (OT)

- *Industrial protocols*
  - *RS232/RS485*
  - *CAN*
  - *Fieldbuses*
  - *Industrial Ethernet*
- *Proprietary protocols*
- *Industrial hardware specs*
- *Industrially encoded data*
- *Industrial certifications*
- *Determinism*
- *Safety standards*





# Les marques et solutions



*Connecting Devices*<sup>TM</sup>

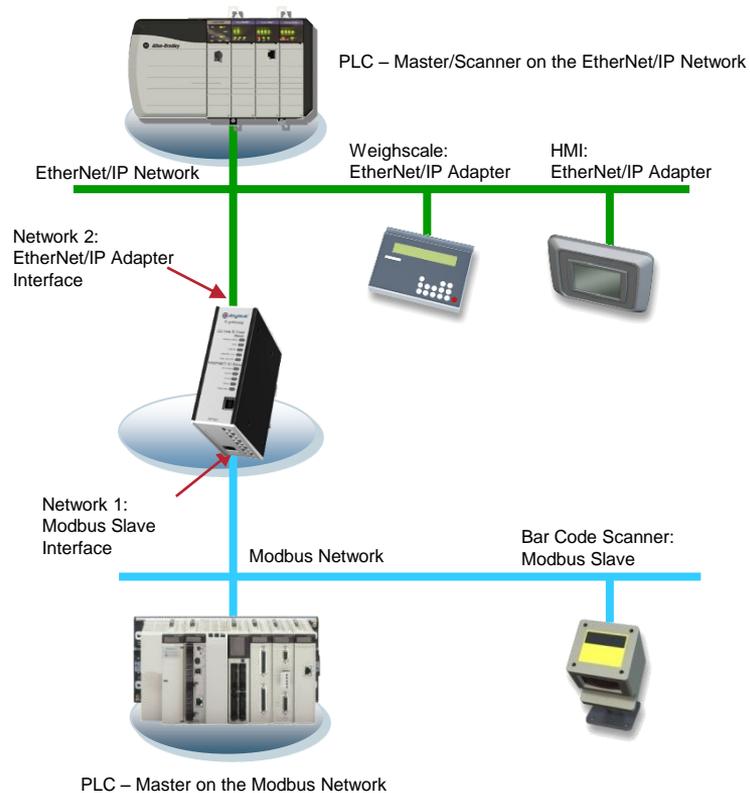
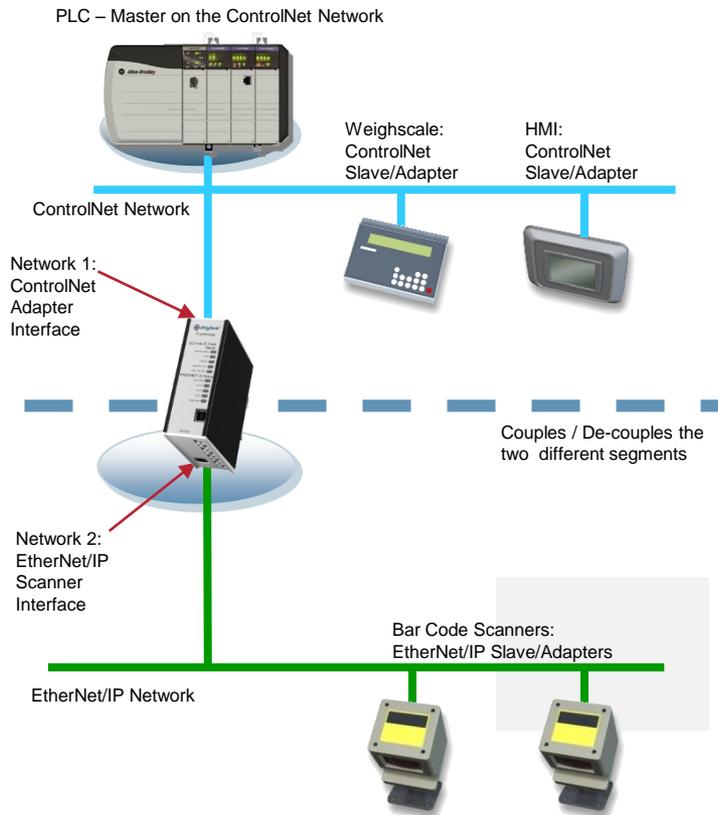




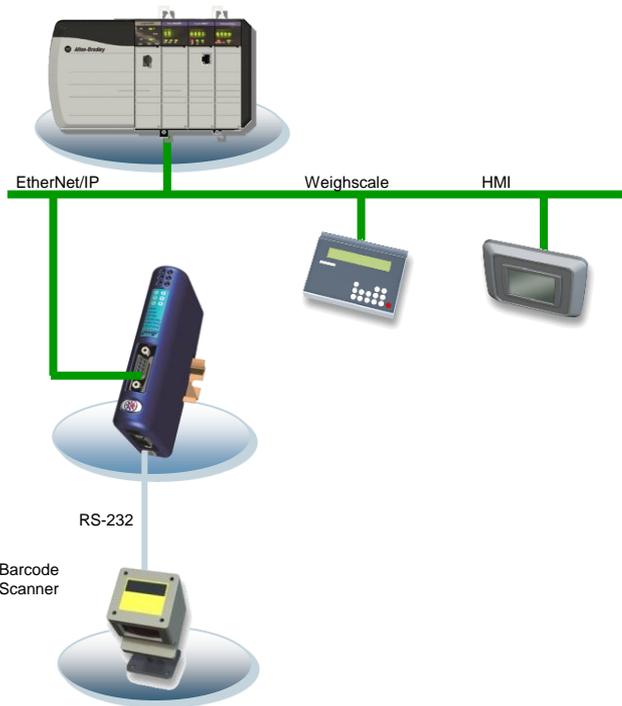
## Selection des réseaux

200 combinaisons d'X-gateways différentes.

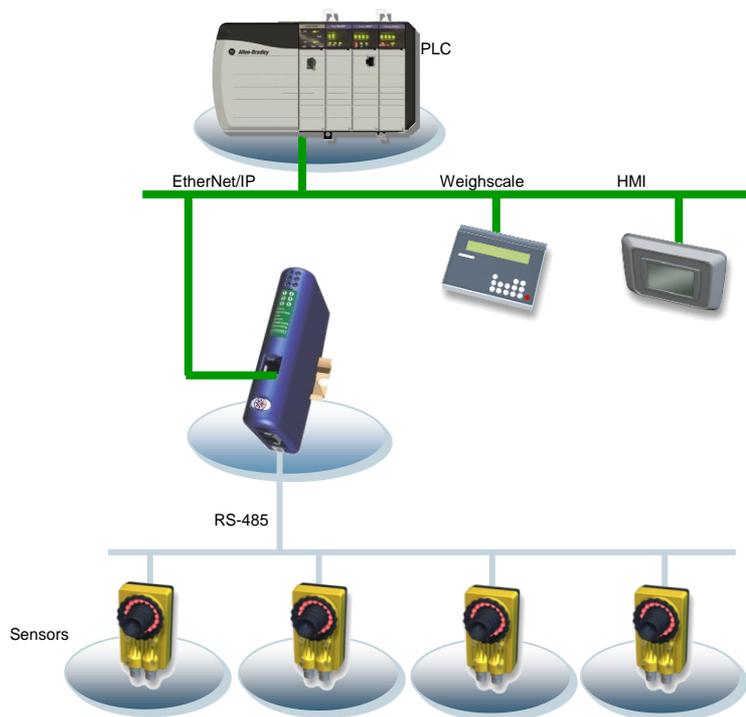




# Anybus Communicator



**Single Drop Mode ( 1 node )**



**Multi Drop Mode (Up to 31 nodes)**

netbiter argos

Temperature  
Power output  
Power consumption  
Start - Stop  
Humidity  
Trends-reports  
Alarms

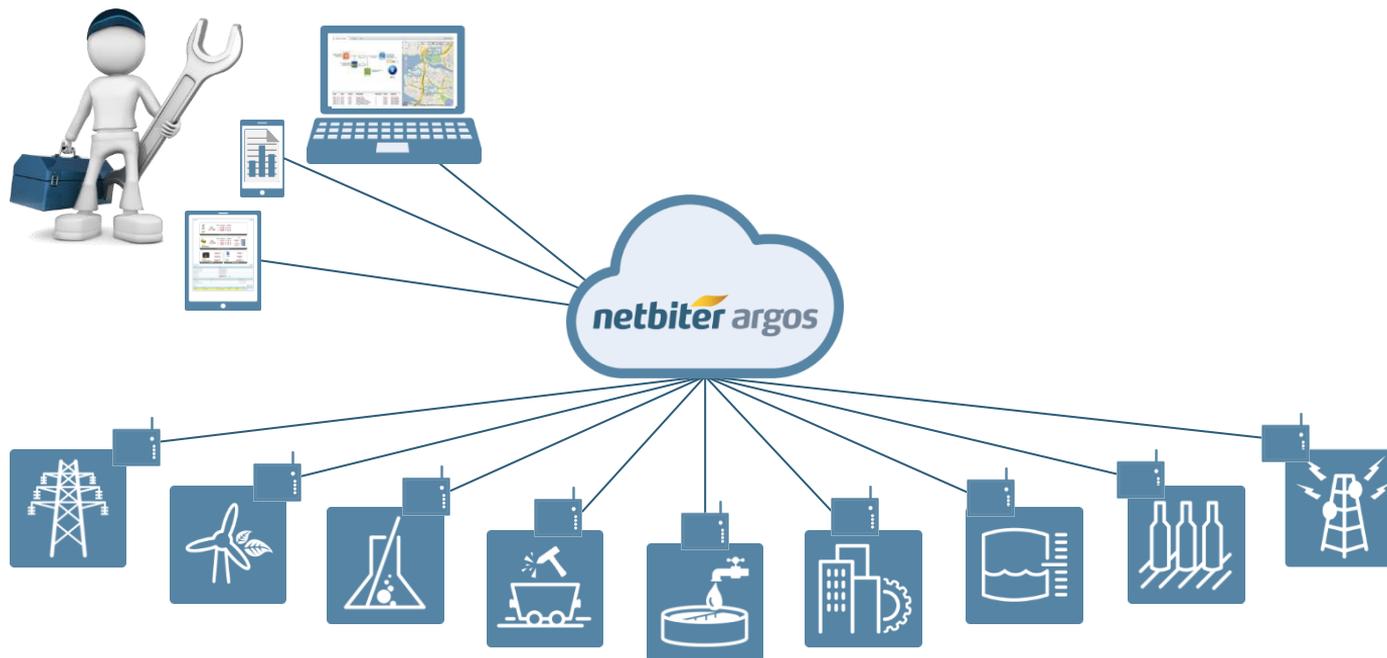
Temperature  
Power output  
Power consumption  
Start - Stop  
Humidity  
Trends-reports  
Alarms



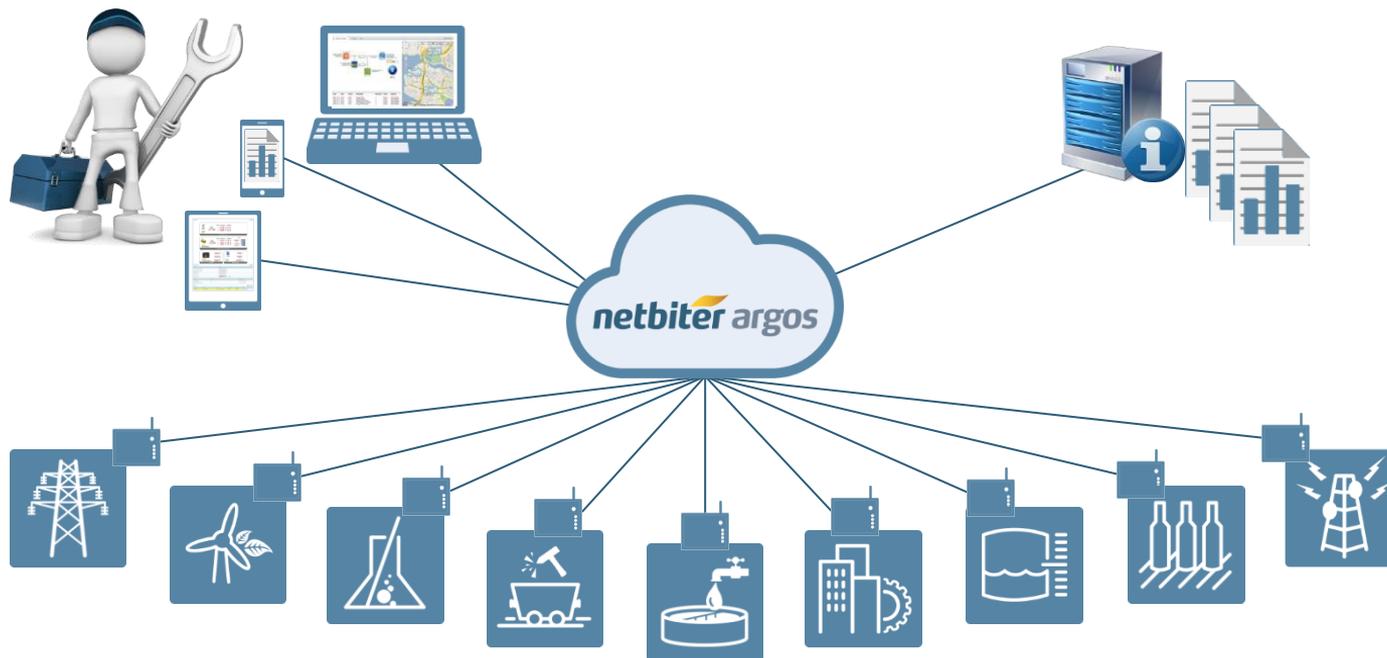
Connectez n'importe quelle installation ou équipement au Cloud



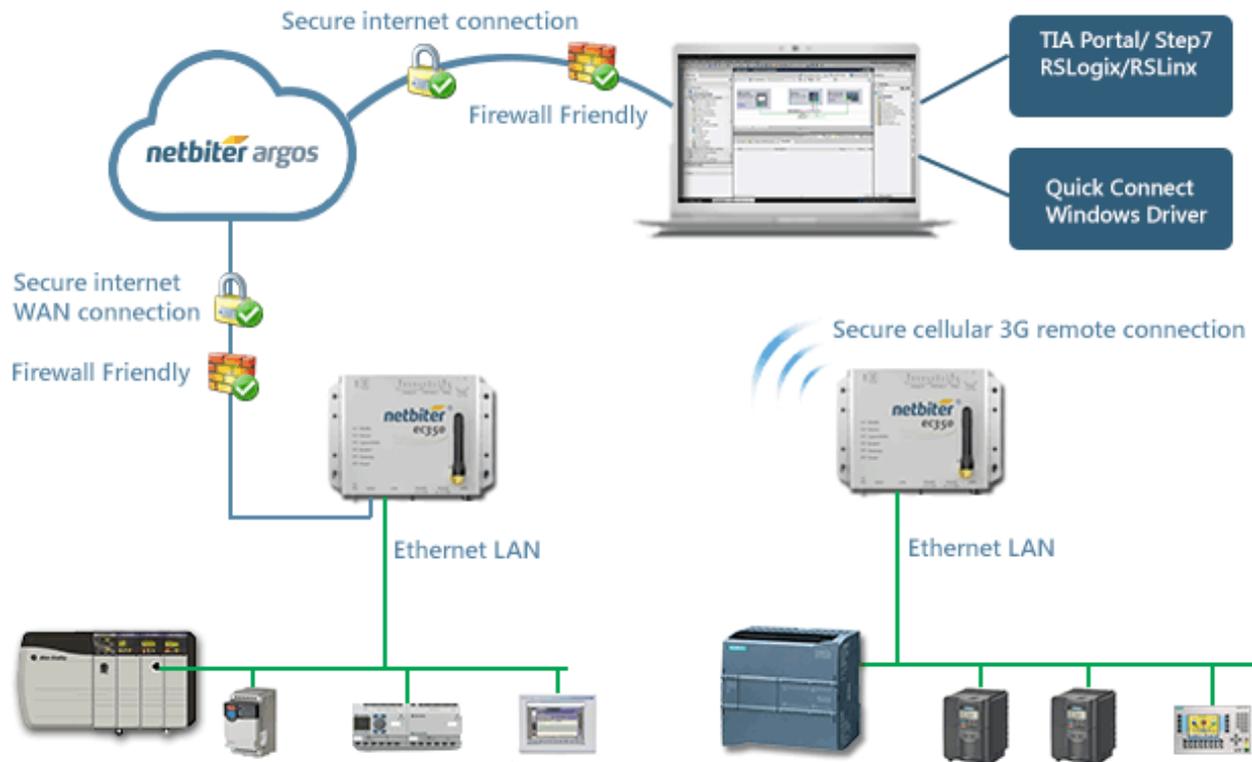
Accès en ligne pour les utilisateurs...



Api permettant la création de votre propre serveur



# Configuration à distance



**BRICK:**



**CHIP:**



**MODULE:**





# Gamme IXXAT



**IXXAT<sup>®</sup>**

Merci



[www.hms-networks.de](http://www.hms-networks.de)

