



ljhba\h^bl\_ev  
R\\_^kdZy dhfiZgby  
HMS Industrial Networks  
(hl^\_e\_gtellicom)

# Netbiter \*

kbkl\_fZ m^Ze\_ggh]h mijZ\e\_gby h[hjm^h\Zg

ÿü þîû ðþóú , ÿü þîû úóþñö , ÿü þîû þóý þÿ !!!

\* lj\_u^ms\_gZaRZgdeCom

# Netbiter – удаленное управление устройствами



Netbiter

```
>hfZ gZ jZ[hI_ \ dhfZg^bjh\d_
<u \k_]^Z kfh`_I_ hI\_Iblv gZ \r
```

```
DZdhc k_cqZk mjh\_gv
\_j_a_j\m?Zj_
```

```
K dZdhc kdhjhklvx
baf_gy_lky mjh\_gv"
```

M^Ze\_gguc dhgljhev h[hjm^h\Zgby q\_j\_]  
Ethernet bGSM/GPRS

```
DZdmx fhsgghklv
\_ujZ[ZIu\Z_I
]\_g_jZPhj
```

- H[\_ki\_qb\Z\_lky ijyfhc ^hkلمي d ^Zgguf h  
khklhygbb jZaebqgh]h h[hjm^h\Zgby \ Ihf  
qbke\_ b ihe\_\uo mkljhckl\

```
GZ kdhev dh o\ZIbl
NiebZ
```

- H[kem`b\Zxsbc i\_jkhgZe ihemqZ\_I DZdmx  
hi\_jZIb\guc ^hkلمي d bgnhjZpbb h ijhp\_kk  
b Z\IhfZIbq\_kdb hih\\_sZ\_lky ijb Z\Zjbcguy  
kblmZpbyo

```
ijhba\h^pl_evghklv
h[_ki_qb\Z_I
gZknkgyZy k?Zgpby
```

- Jmdh\h^kl\h kh[kl\\_ggbd ihemqZ\_li\_ijhklh cZPhI\_  
kihkh[ m^Ze\_ggh]h dhgljhey

```
KemqZebkv eb
hklh cZPhI_
```

K h k I Z \ k b k I \_ Netbiter

K i \_ p b Z e b a b j h \ Z g g u c a Z s b s \_ Netbiter . k e t j \ \_ j

- M i j Z \ e \_ g b \_ i j h \_ d l h f

## 2. Ethernet- r e x a

- H [ \_ k i \_ q \_ g b \_ ^ h k l m i Z d ^ Z g g u f q \_ j \_ a i j h \ h ^ g u \_ k \_ I Ethernet b [ \_ k i j h \ h ^ GSM/ GPRS
- < k l j h \_ g g u M o d b u s M a s t e r ^ e y i h e m q \_ g b y ^ Z g g u o h l \ g \_ r g b o m k l j M o d b u s S l a v e
- < k l j h \_ g g u \_ d Z g Z e u Z g Z e h ] h \ h ] h b ^ b k d j \_ l g h ] h \ \ h ^ Z \ u \ h ^ Z \ g \_ d h l h j u o f h ^ \_ e y o

F h ^ m e b \ \ h ^ Z \ u \ h ^ Z

- H [ \_ k i \_ q \_ g b \_ l j \_ [ m \_ f h ] h d h e b q \_ k l \ Z Z g Z e h ] h \ u o b ^ b k d j \_ l g u o d Z g Z e h \ \ \ h ^ Z \ u \ h ^ Z g m ` g h ] h l b i Z

# Общая проблема – Firewall (межсетевая защита)

- Firewall [ehdbjm\_l ^hklmi ba  
 \g\_rgbo k\_l\_c

■ ВЕ^\_iZjIZf\_gjl\_^ijbylby  
^ey h[\_ki\_q\_gby [\_ahiZkghklb  
g\_hldju\Z\_l ^hklmi q\_j\_a  
Firewall...

■ « beb ijhp\_kk gZkljhcdb  
aZgbfZ\_l fgh]h \j\_f\_gb b kbe

# Общая проблема – доступ через GPRS

- G\_ba\\_klguc beb ^bgZfbq\_kdbc  
IP-Z^j\_k
- Nbdkbjh\Zgguc im[IPbqguc  
Z^j\_klhbl ^hjh]h
- H[\_ki\_q\_gvBN ^hklmiZ  
klhbl ^hjh]h
- G\\_k\\_l\\_e\\_dhffmgbdZpbhggu\_  
ijh\Zc^\_ju h[\_ki\_qb\Zxl  
gZ^\_`guc dZgZe i\_j\_^Zqb  
^Zgguo
- Ki\_pbZevSIM-dZjlM2M  
^hjh]b





## Решения Netbiter EasyConnect

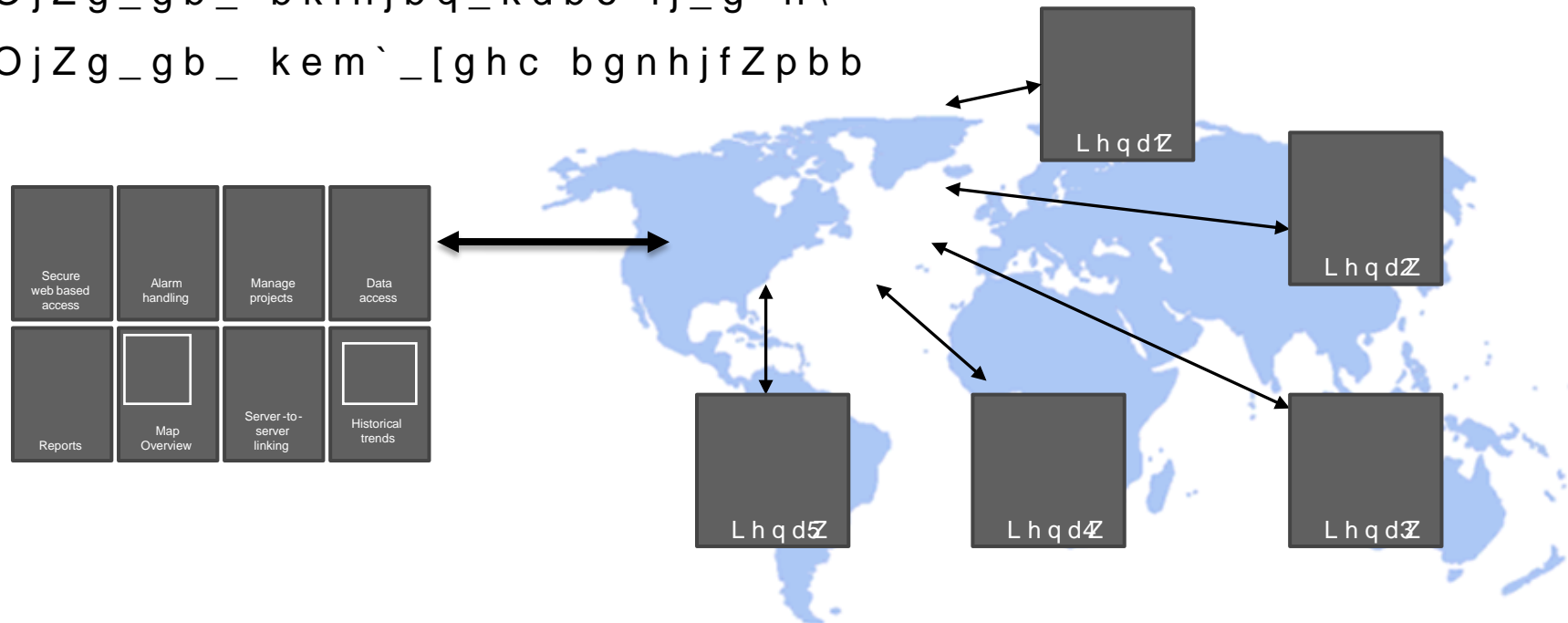
bkihevamxlmgbdzvngxl\_logheh]bx kha^Zgby aZsbs\_ggh]h d

- ✓ DZgZe i\_j\_^Zqb ^Zgguo g\_  
[ehdbjm\_lky f\_`k\_l\_\ufb  
wdjZgZ(Firewall)
- ✓ Nbdkbjh\Zgguc b im[ebqguc  
IP-Z^j\_g\_lj\_[m\_lky
- ✓ G\_l ihlj\_[ghklb kha^Z\Zlv  
VPN-lm gg\_eb
- ✓ >eGPRS kh\_^bg\_gby fh`gh  
bkihevah\Zlv h[SIMg u\_  
dZjlu

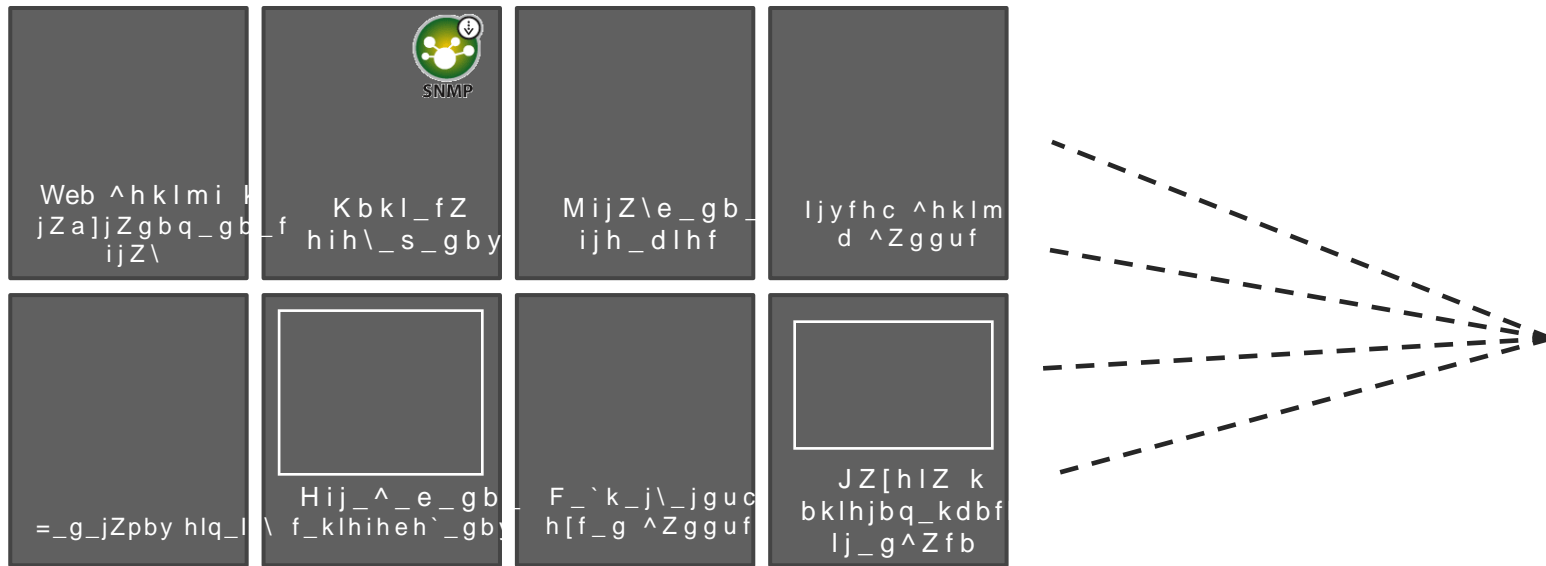
# Общая проблема — очень распределенная система

A Z ^ Z q b

- H[\_ki\_q\_gb\_ ohjhr\_c \bamZebaZpbb b [ukljh]h ^hklmiZ d ^ hl [hevrh]h dhebq\_kl\Z bklhqgbdh\
- H[\_ki\_q\_gb\_ wnn\_dlb\gh]h bkihevah\Zgby [hevrhc kbkl\_fu
- Ijhklh\_ dhgnb]mjbjh\Zgb\_
- OjZg\_gb\_ bklhjbq\_kdbo Ij\_g^h\
- OjZg\_gb\_ kem`\_[ghc bgnhjfZpbb



# Решение – портал Netbiter® Argos



Web-ihjIZe h[\_ki\_qb\Z\_l [\_ki\_j\_[hcguc ^hklm  
^ey fhgblhjbq]Z b mijZ\|e\_gby m^Ze\_ggufb r  
[hevrhc gZ[hj k\_j\bkguo nmgdpbc



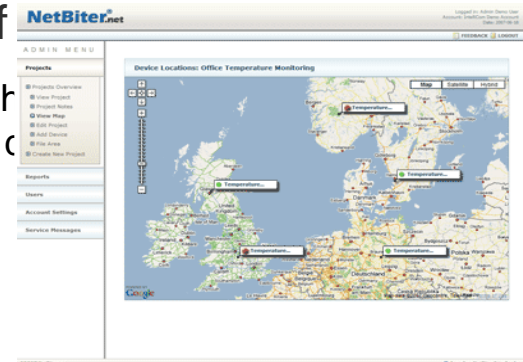
Fhgblhjb] b mijZ\e\_gb\_ h[hjm^h\Zgb\_f

- AZsbs\_gguc ^hklmi
- lZjhevgZy kbkl\_fZ jZa]jZgbq\_gby ijZ\
- GZkljZb\Z\_fuc [ukljuc h[ahj \k\_]h h[hjm^h\Zgby \ijh\_dl\_
- M^Ze\_gguc ^hklmi d l\_dmsbf ^Zgguf h[hjm^h\Zgby \hafh`ghklv ihkueZlv dhfZg^u mijZ\e\_gby
- >he]h\j\_f\_ggh\_ Zjob\gh\_ ojZg\_gb\_ \Z`guo nZceh\ (j\_a\_j\gu\_ d,hdh]nb]mjZpbhggu\_ nZceu b ij

lhabpbhgjbh\Zgb\_

jZ[hIZ k i\_j\_f\_sZxsbfbk y h[t\_dIZf

- Hij\_^\_e\_gb\_ dhhj^bgZI b mdZaZgb\_ iheh dZd klZpbhgZjguo lZd b ih^b`guo h[t\_c
- Geo-fencing- fhgblhjb] gZoh`^\_gby h[t\_dIZ \bjlmZevgh]h i\_jbf\_ljZ ijb i\_j\_k\_q\_gbb ijhbkoh^bl hih\\_s\_gb\_ ihevah\ZI\_ey
- ljhklhc ^hklmi d ^Zgguf ih^b`guo mkljhcκκ\



K[hj b ojZg\_gb\_ ^Zgguo

- >he]h\j\_f\_ggh\_ ojZg\_gb\_ Zjob\h\ ^Zgguo
- lj\_^klZ\e\_gb\_ ^Zgguo \ m^h[ghf ^ey ZgZebaZ  
]jZnbq\_kdhf \b^\_ lj\_g^u
- Wdkihjl ^Zgguo \ jZaebqgu\_ nhjfZlu  
(gZijbf\_ Excel)

Hlq\_lu

- GZkljZb\Z\_fu\_ hlq\_lu dhlhju\_ Z\lhfZlbq\_kdb  
nhjfbjmxlky ih khklZ\e\_gghfm jZkibkZgbx b  
jZkkueZxlk E-mail
- Hlq\_lu fh]ml kh^\_j`Zlv kem`\_[gu\_  
iZjZf\_lju ^Zggu\_ baf\_j\_gbc lj\_\h`gu\_  
hih\\_s\_gby \uoh^ aZ mjklZ\chd[ju\  
k\yab b ij

# Обзор сервисов портала Netbiter® Argos



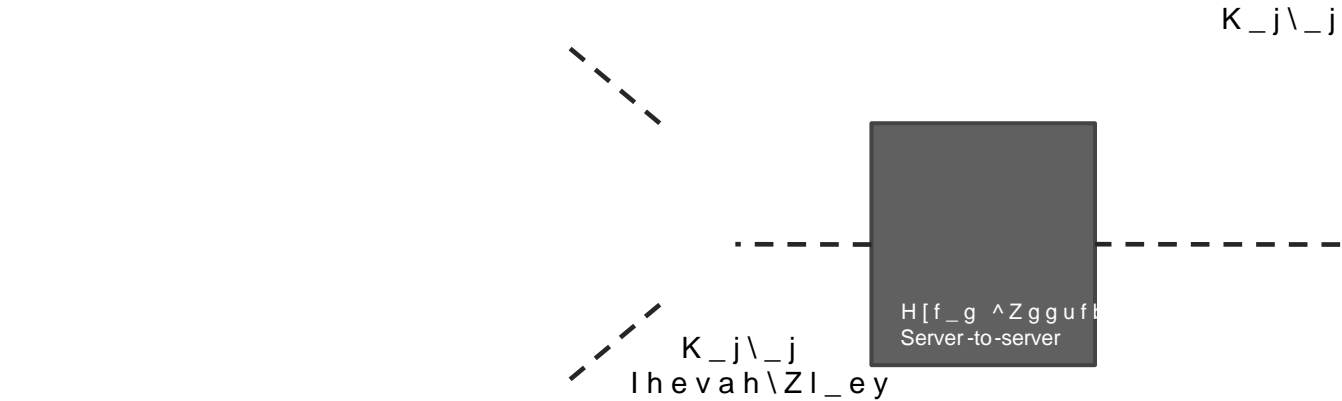
Lj\_\h`gh\_ hih\\_s\_gb\_

- >\Z lbiZ hih\\_s\_gbc h[uqgu\_ b k  
h[yaZI\_ev guf ih^l\\_j`^\_gb\_f ihemq\_gby
- JZkkuedZ hih\\_s\_gb\_ SNMP, SMS be b-  
mail
- <\_^\_gb\_ Zjob\Z lj\_\h`guo hih\\_s\_gbc

F\_`k\_j\\_jguc h[f\_g ^Zggufb

- Hkgh\Zg gZ klZg^Zjlghf SOAP dhe\_
- >hklmi d ^Zgguf Netbiter® ^jm]bf  
kbkl\_fZf IZdbf dZd
  - Ihevah\ZI\_e web/intranet k\_j\\_j
  - Kbkl\_fu mijZ\e\_gby ij\_^ijbylb\_f
  - SCADA/HMI kbkl\_fu
  - >jm]b\_ ijh^mdlu bkihevamxs\_b\_ HJK  
l\_ogheh]bb
- l\_j\_^ZqZ k\h^hd ih ijRSS dhem

# Сервер Пользователя



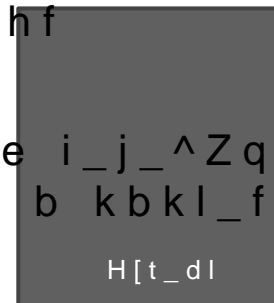
Ihevah\ZI\_evkdbc bgl\_jn\_ck

GZkljZb\Z\_fZy KbkI\_fZ

- K\_j\\_j Netbiter h[\_ki\_qb\Z\_l h[f\_g ^Zggufb k k\_j\\_jh Ihevah\ZI\_ey
- GZ k\_j\\_j\_ ihevah\ZI\_ey ihemqZ\_fu\_ ^Zgg\_u\_ fh`gh h[jZ[Zlu\Zlv ex[uf kihkh[hf gZijbf\_j ijb ihf(SCADA)
- H[\_ki\_qb\Z\_lky kd\haghc dZgZe i\_j\_^Zqb ^Zgguo f\_`^m ihe\_\uf ^Zlqbdhf b kbkI\_fhc \\_jog\_]h mjh\gy



Rexa NetBiter



## Netbiter® EC (EasyConnect )

- JZ[hIZ\_l lhev dh q\_j\_ Netbiter Argos ihevah\ZI\_ev ihemqZ\_l  
^Zggg\_u\_ g\_ ba rexaZ Z k k\_j\\_jZ
- Mijhs\_gguc ijhp\_kk bgklZehyq b bZc\_j\heh\ jZ[hIZ [\_a  
klZlBq\_k bPhZ^j\_kZ b ij
- M^Ze\_ggh\_ dhgnb]mjbjh\Zgb\_ b mijZ\e\_gb\_ ih k\_lb
- K\yav h[\_ki\_qb\Z\_lky qEthernet b GPRS
- <kljh\_gguc gZ[hj dZgZeh\ ^bk dj\_lgh]h b ZgZeh]h\h]h \h^Z \u\h^Z  
jZkrbj\_gb\_ q\_j\_a \Modbus fh^m eb << rexa jZ[hIZ\_l dZd  
Modbus Master)

## Netbiter® WS (WebSCADA)

- <kljh\_gguc web-k\_j\\_j h[\_ki\_qb\Z\_l ^hklmi d ^Zgguf \ iZfyIb rexaZ
- :job\u ^Zgguo b lj\_\h] fh]ml ^m[ebjh\Z NetbiterZgs\_j\\_j\_
- Dhgnb]mjbjh\Zgb\_ ijhba\h^b lky ehdZevgh
- K\yav h[\_ki\_qb\Z\_lky qEthernet GPRS beb q\_j\_a \g\_rgbc  
ZgZeh]h\uc fh^\_f
- <kljh\_gguc Modbus Master ^ey ih^dexq\_gby \g\_rgbo fh^me\_c << b  
^jm]bo mkljhckl\

## Netbiter® I/O Extender

- IOX-DAIO (4 × DI, 2 × DO, 2 × AI(V, mA), 1 × AO(V, mA), 1 × RTD)
- IOX-8DIO (8 × Digital Input and 8 × Digital Output)
- IOX-4RO (4 × Relay Outputs)
- IOX-6RTD (6 × RTD PT100/1000 or Ni120/1000 2/3 wire)
- IOX-8AIV (8 × Analog 0-10 V Inputs)
- IOX-8AIIS (8 × Analog isolated 0-20 mA current Inputs)



GPS- k \_ g k h j

- lh^dexqZ\_lky d reXam ^ey lhqgh]h hij\_^  
l\_dms\_]h f\_klhiheh`\_gby mkljhckl\Z

<g\_rgyy Zgl\_ggZ k dZ[\_e\_f

- lha\hey\_l jZaf\_klblv Zgl\_ggm \ m^h[ghf f\_kl\_ k  
emqrbf mjh\g\_f kb]gZeZ

M^ebgbl\_ev guc dZ[\_ev

- lha\hey\_l jZaf\_klblv rIZl gmx beb ^jm]mx Zgl\_ggm k  
jZat\_fhf \ m^h[ghf f\_kl\_ k emqrbf mjh\g\_f kb]gZeZ



# Области применения

ljhfure\_ggu\_  
oh^hev^gb

We\_dljh  
]\_g\_jZlhju

Dhfij\_kkhjgu  
kIZgpbb

Wg\_j]\_lbdZ

<h^h  
ih^]h\h\dZ

lh^\b`gu\_  
h[t\_dlu

GZkhkgu\_  
kIZgpbb

J\_a\_j\gh\_  
we\_dljhiblZg

ljhfure\_ggZy  
Z\lhfZlbaZpb

:\lhfZlbaZpb  
a^Zgbc