

# DiLoc | ↔

Mobile communication for  
driving personnel



**DiLoc|Sync** for Rail Transportation

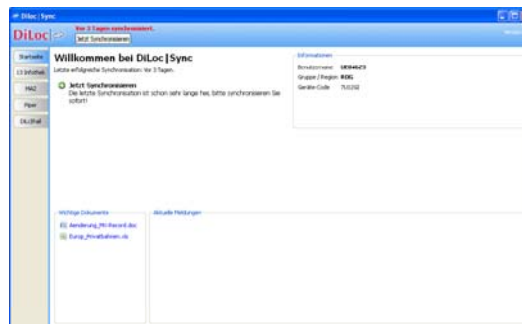
Information Logistics

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## DiLoc|Sync User Interface

- ▲ Intuitive user interface
- ▲ Few mouse clicks to any given function
- ▲ Customizable range of functions
- ▲ Colour scheme according to company requirements



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## General Functions (1)

- ▲ Direct access to predefined web content  
access can be restricted using specially developed browsers (white list)
- ▲ Access to general documents and templates without network connection
  - Timetables
  - Duty rosters
  - Temporary speed restrictions, etc.
  - Track control diagrams
  - Local guidelines
  - Instructions
  - Regulations
  - Forms
  - Documents
  - Computer-based training/advanced courses
- ▲ Manual or automated document synchronization
- ▲ Read/write documents (doc, xls, ppt, pdf, ...)

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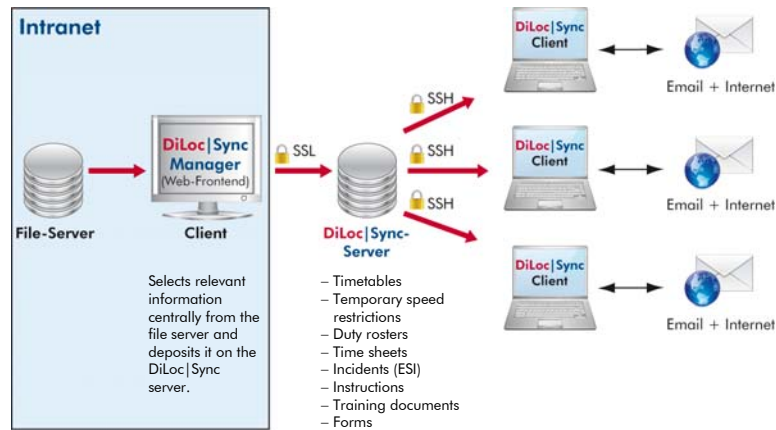
## General Functions (2)

- ▲ Malfunction and incident reporting
- ▲ Send and receive e-mails
- ▲ Run special, locally installed programs
- ▲ Customizable devices (each engine driver has a personal device)
- ▲ Messaging function for engine driver and groups of drivers with reply capability
- ▲ Timesheet keeping with interface to HR system possible
- ▲ Use of OpenOffice -> no licensing costs
- ▲ Run main application automatically every time Windows starts
- ▲ Automated rollout procedure for new software releases
- ▲ Encrypted data transfer (same as online banking)

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## Online access architecture with local replication



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## Security Architecture

### 🔒 SSL connection

- ▲ The connection to the DiLoc server for uploading data for publication is established as an SSL connection, putting it at the same security standard as for online banking.
- ▲ Only select users are given write permissions to the directory.
- ▲ If the company's outbound IP addresses are known, then access can be further restricted to those addresses using firewall rules, thereby increasing security even further.

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## Security Architecture

### SSH connection

- ▲ The netbook client to DiLoc server connection is established as an SSH connection.
- ▲ SSH allows a secure, authenticated and encrypted connection between computers over an insecure network (Internet), and is a long-established secure communications solution.
- ▲ SSH prevents man-in-the-middle attacks, which means the netbook client cannot synchronize with another (unknown) server.
- ▲ All queries over an SSH connection are automatically secured inside a read-only sandbox, so that no access to other data is possible. Access is also read-only, which means it is not possible to modify data on the server over the SSH connection.

There are no other services that connect to the Internet on the DiLoc server. So, there is no way of accessing the data other than that described above.



## Systems for disposition and localisation in transport logistics

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