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Subject: Globally Unique IDs (GUIDs)

Posted by [Nils Poldrack](#) on Mon, 05 Apr 2004 09:00:01 GMT

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Hello,

Joachim Buechse from Ergon (CH) suggested on 2003-09-25 to use globally unique identifier for railML elements. He suggested to use the IP of the creating computer concatenated with the milliseconds (e.g. since 1970-01-01).

In my "Instructions how to build a railML scheme" I adopted this proposal. IPv4 and IPv6 create different spaces for their GUIDs.

Advantages of Joachim's proposal are:

- IP is easy to determine.
- The milliseconds since 1970-01-01 are easy to determine.
- There is not force to convert IPv4 to IPv6 or to pad the length.
- The saving format doesn't matter: HEX or Base64.

Disadvantages of Joachim's proposal are:

- No anonymity: via static IP it's possible to find the creator of the GUID.
- Not every computer has got an IP.

Ulrich Linder made the suggestion to use the MAC instead of the IP: there is anonymity and (almost) every PC has a network card and so a MAC. (I don't know how to read the MAC - but this is a problem of the software engineer.)

Please write me your opinion. I prefer Joachim's GUID but using MAC instead of IP. Thank you there much for your statement.

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PS. Sorry for my "rusty" English.

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