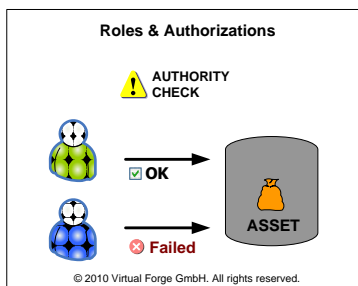


ABAP Backdoors and Compliance Killers

Andreas Wiegenstein



>> SAP Standard Security features #1

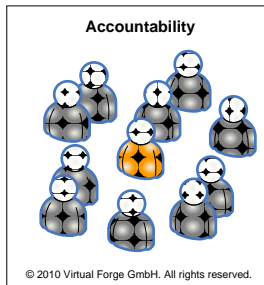


Missing / Incorrect authority checks

Hard-coded users

```
IF SY-UNAME = 'WIEGENSTEIN'.
```

>> SAP Standard Security features #2



Alias authorizations

```
AUTHORITY-CHECK ... FOR USER 'SAP*'.  
SUBMIT ... USER 'DDIC'.
```

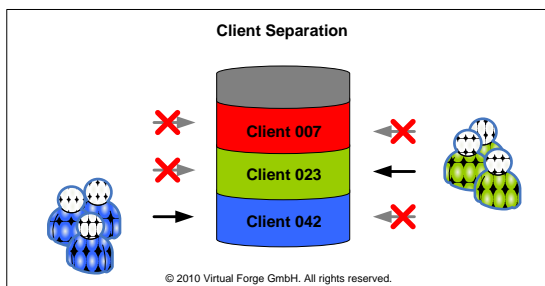
Bypassing logging mechanism in OSQL

```
EXEC SQL.  
ADBC
```

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>> SAP Standard Security features #3



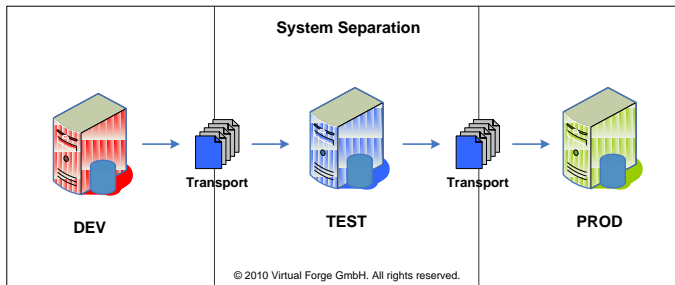
Bypassing 'mandt'

```
SELECT FROM ... CLIENT SPECIFIED  
EXEC SQL.  
ADBC
```

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>> SAP Standard Security features #4



Bypassing the TEST system

```
IF SY-SYSID = 'B20' .  
Undocumented Features  
Hidden OK Codes
```

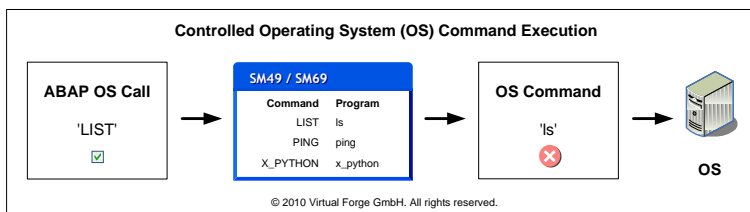
Generating Code on the PROD system

```
INSERT REPORT  
GENERATE SUBROUTINE POOL
```

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>> SAP Standard Security features #5



Bypassing SM49 / SM69 restrictions

```
CALL 'SYSTEM' ...  
OPEN DATASET ... FILTER 'format c:'
```

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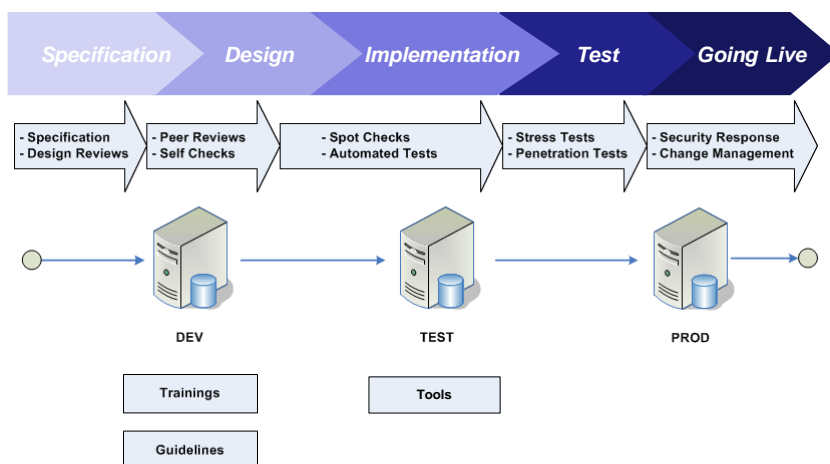
>> ABAP Security Defects

DEMOS

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>> Secure Development Process (SDP) for ABAP

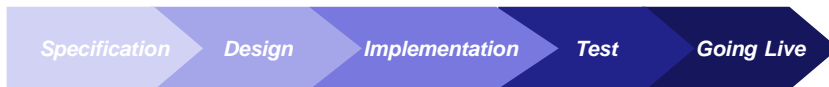


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>> SDP Maturity Levels

The SDP Maturity Model defines the degree a company implements methods and tools to achieve quality in the development process and the grade of test automation.



- Ad-Hoc
 - Quality is a reactive process
- Minimal
 - Basic quality awareness, but only minimal execution of tests
- Without Feedback
 - Established process, but feedback/results are not used to enhance it
- Planned and Controlled
 - Code quality is considered from the beginning
 - Proper metrics exist for process monitoring
 - Process is extended whenever necessary

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>> Secure ABAP Development

Organizations



BIZEC – Business Security Initiative
<http://www.bizec.org>

Literature



Sichere ABAP-Programmierung
SAP Press 09/2009

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