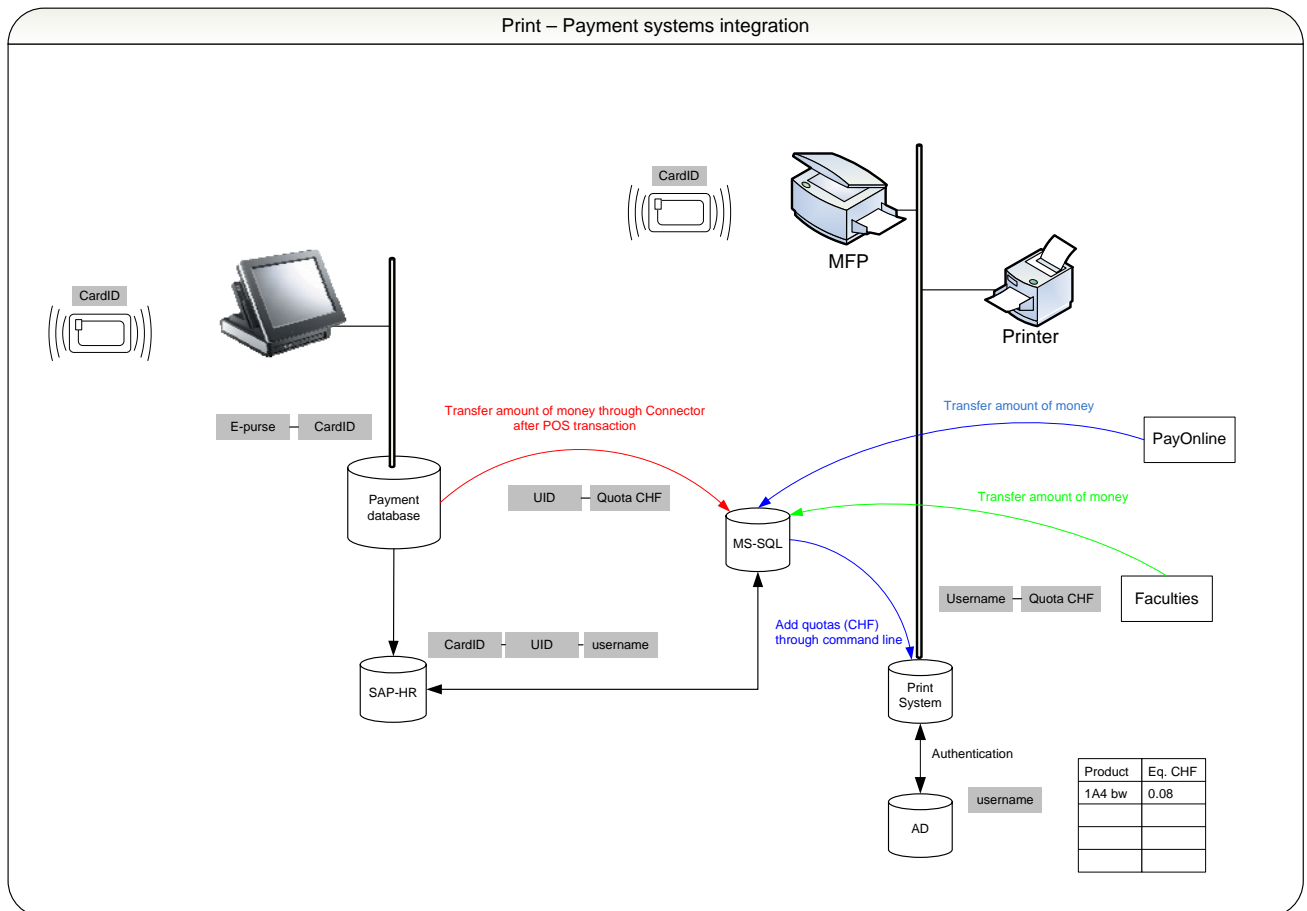# Use Case 3 : Print-Payment Systems Integration

You have received the following architecture for the integration of a print system in a university:

You need to synchronize budgets between the payment and the print systems. As the MFP (Multifunction Printers) have some limitation, their need to store the print-budget as quotas in their own Print-System Database. This DB has to be synchronized with Active Directory.

Discuss in your group which kinds of integration are possible and write on a sheet of paper the advantages, disadvantages of them and where the potentially risks of failure are.

Create the file structure to handle these synchronizations. Draw the UML sequence diagram to describe the different file exchange flows.

Use Case 1 : GateControl-BadgeMaker Systems Integration

Your boss had a meeting with an event organizer. You can see below the architecture of the security system. After having produced a badge, the access control is used to check how long people have been inside the room 1 and room 2 to pay their salaries through SAP. Discuss in your group which kinds of integration are possible and write on a sheet of paper the advantages, disadvantages of them and where the potentially risks of failure are. Create the file structure to handle these synchronizations. Draw the UML sequence diagram to describe the different file exchange flows

GateControl – BadgePrinter systems integration

CardID

CardID

Door 2

CardID

Door 1

PIN-Code — Access Rights

Transfer access right to Gatecontrol System

CardID — Default Access Rights

BadgeMaker database

UID — CardID

PIN-Code — UID — WorkTime (out-in)

SAP HR
SAP PAYROLL

GateControl database

Access Rights

Emergency Group

Give additional access rights