

Sample System Design



Key Concepts

A zone is an area defined by the readers that grant access to it. In this example, doors 2& 3 define the IT Room area (even though they exit to different places). Privileges grant access to a group into a zone on a schedule. Thus, anyone having access to the IT room zone could come in by either door using their credential.

Doors connect two zones even though there may only be one direction that is controlled.

Behaviors primarily define the unlock schedule for a door. For example, door 2 might have a never schedule while door three might unlock during the day, so that unauthorized personnel (no valid credential) could only gain access via the Office zone during the unlock period.

Schedules define when. If they are used on a behavior, they define when the door unlocks. If they are used on a privilege, they define when a cardholder can gain access to a zone using their credential. Typically privilege schedules overlap those on behaviors. A common use is an office hours behavior that unlocks the door during the day, and cardholders have an always (24x7) schedule, allowing them to gain access at any time. (obviously if the door is unlocked, they don't need to use the credential)

Groups are collections of people. A person can be a member of any number of groups as needed.

Privileges bring together groups, schedules and zones to give a group access to a zone on a schedule (This has nothing to do with the door unlock schedule)

Assumptions

For doors that unlock on a schedule, employees with access can get in using their credentials for a limited time before and after the unlock schedule



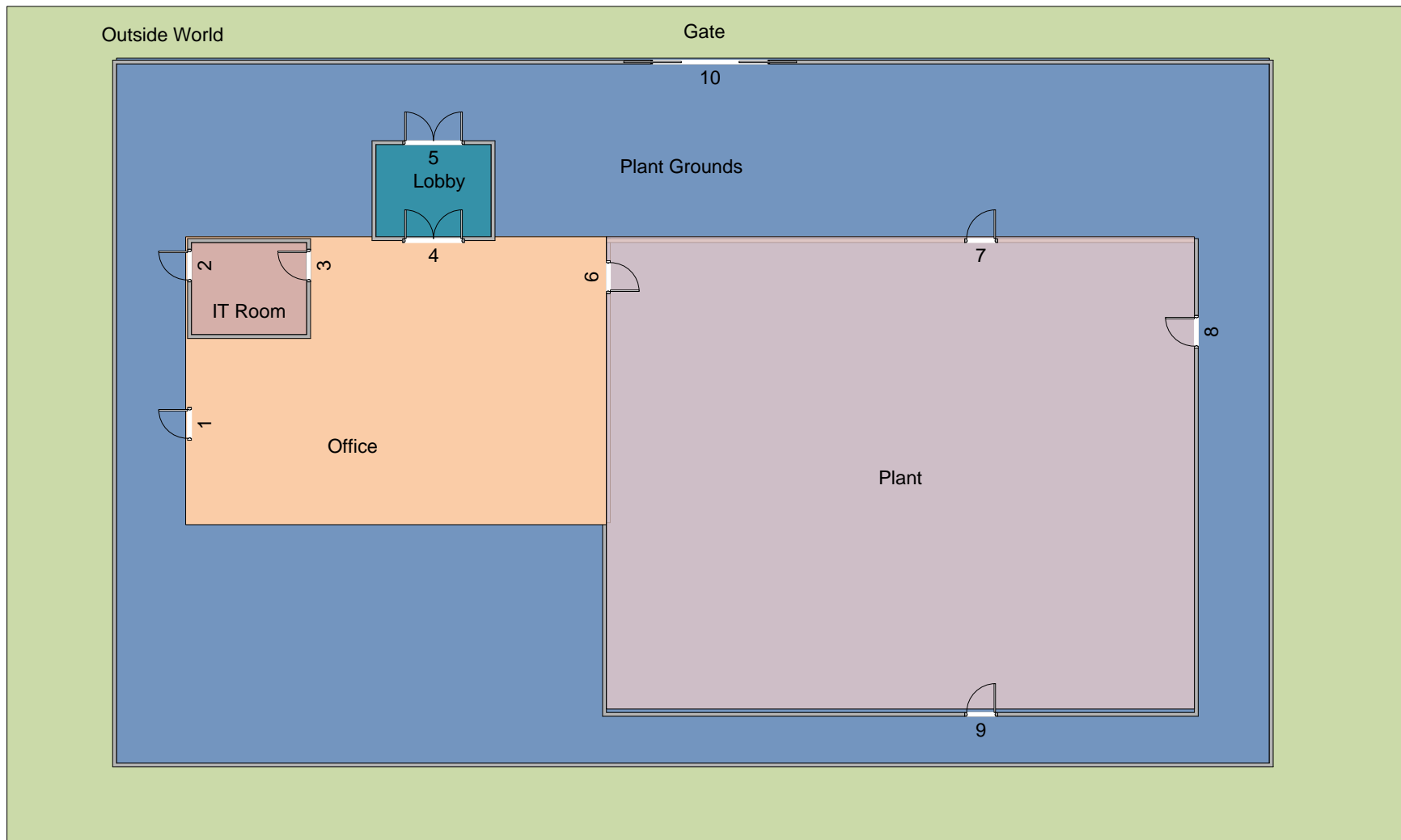


Figure 1. Sample Plant

Zones

Name	Definition
Outside World	Outside of the gate and fence, i.e. off property (used for completeness so every door connects two zones)
Plant Grounds	Inside the gate, but not in the building
Office	Office common areas that all or most office employees have access to
Lobby	Front lobby area (to allow visitors to come in the building but not past the lobby without escort)
IT Rooms	IT server rooms and other areas secured for the IT group (there may be multiple of these.)
Plant	One common Zone for the plant area

Schedules

Name	Definition
Never	No schedule blocked out, on a behavior has the door locked 24x7 on a privilege never grants a person access (same as no privilege)
Always	Unlocked 24x7 or access is granted to a group at any time
Office Hours Unlock	8am - 5pm Office hour schedule (used for door unlock)
Plant Hours Unlock	7am – 4pm Plant schedule (used for door unlock)
Office Hours Access	5:30am – 8pm Office Access Hours
Plant Hours Access	5:30am – 6pm Plant Access Hours

Behaviors

Behavior	Schedule
Always Locked	Never
Office Hours	Office Hours Unlock
Plant Hours	Plant Hours Unlock

Doors

#	Door	Behavior	Zone 1	Zone 2
1	Office – Outside	Always Locked	Office	Grounds
2	IT Room Exit	Always Locked	IT Room	Grounds
3	IT Room	Always Locked	IT Room	Office
4	Office Lobby	Always Locked	Office	Lobby
5	Lobby Entrance	Office Hours	Lobby	Grounds
6	Office - Plant	Office Hours	Office	Plant
7	Plant North	Plant Hours	Plant	Grounds
8	Plant East	Plant Hours	Plant	Grounds
9	Plant South	Plant Hours	Plant	Grounds
10	Gate	Always Locked	Grounds	Outside

Groups

Name	Definition
Everyone	All people who can get to common areas (Such as through the gate)
Office	All employees who are allowed into the main office area
IT	IT Employees who can get into the IT rooms
Plant Employees	Basic plant employee group
Plant Supervisor	Supervisors who have expanded privileges
Security Guards	Guards that need to be able to get everywhere in an emergency
Management	Management level employees who have full access

Privileges

Group	Zone	Schedule
Everyone	Plant Grounds	Always
Office	Office	Office Hours Access
Office	Lobby	Office Hours Access
Office	Plant	Plant Hours Unlock
IT	IT Room	Always
Plant Employees	Plant	Plant Access Hours
Plant Supervisor	Plant	Always
Plant Supervisor	Office	Office Hours Access
Security Guards	Office	Always
Security Guards	IT Room	Always
Security Guards	Lobby	Always
Security Guards	Plant	Always
Management	Office	Always
Management	IT Room	Always
Management	Lobby	Always
Management	Plant	Always