

- 12. Does each integration test cover the relevant interfaces sufficiently?
- 13. Does each integration test cover the relevant features which that build level represents, to give you confidence that the build is worth continuing?
- 14. Do you have a sufficient regression test for each integration step?

B.17 System Test Review Checklist

- 1. Is the system test preparation and execution planned to allow sufficiently for overruns?
 - a. Is there a sufficient number of system test cycles built in?
 - b. Has sufficient time been allowed for bug fixing in between?
- 2. Has the system test documentation been checked to ensure that all the requirements of the requirements specification have been tested and are met?
- 3. Is every requirement matched by one or more system tests?
- 4. Is every system test traceable to some requirement?
- 5. Have all the test objectives been reviewed?
- 6. If part of a multiply-redundant system fails under test?
 - a. is the root cause of failure established?
 - b. are similar items inspected for a similar potential cause of failure?
- 7. Is there sufficient independence in the testing of diverse equipment and functions?
- 8. Is there a software system test on host specification? Does it ensure that there are criteria for the test coverage (for example, is each control flow path through the program tested to ensure that each statement is executed at least once)?
- 9. If not, that the coverage of the tests is known?
- 10. Is graceful degradation test of the system in all modes tested for?
- 11. Is fault tolerance test of the system in all modes tested for?
- 12. Do you have tests of inter-system data transfer?
- 13. If you have to integrate with existing systems, do you have:
 - a. definitions of the interfaces with the other systems?
 - b. the requirements specifications of the other systems?
 - c. definitions of the dataflowing across these interfaces?
 - d. stubs, drivers or other harnesses to simulate the interfaces with these other systems?
- 14. Do you have definitions of all business processes which your system supports? Can you identify which processes trigger which system features?
- 15. Do you have copies of sufficient test data? Have you validated it?
- 16. Are any data structure changes proposed before go-live?
- 17. Do you have a simple database test which writes a record, reads it back and compares it, updates it and compares it, and finally deletes it and checks that it no longer exists?
- 18. Has training been given, appropriate to the risks to be carried out and the staff involved?
- 19. Are testing and commissioning procedure sufficiently explicit in their detail so that they do not leave interpretations or important decisions to be made by testing and commissioning staff?

B.18 Operations Acceptance Checklist

Table B.2 is included for completeness because it marks the limit of the responsibility of the test manager. Unless testing has an exceptionally-wide remit, the test process is over once section 2.7 is complete. It identifies a number of quality gates. You might want to add more.

TABLE

Project
1. System
No.

1.1

1.2

1.3

1.4

1.5

1.6

1.7

2. System
No.

2.1

2.2

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2.7.8

2.7.9

2.8

2.9

TABLE B.2 Operations acceptance checklist

Project Name:						
1. System documentation						
No.	Support	Requirement	Comments	Owner	Date	Pass*
1.1		Physical deployment design signed-off				
1.2		Project installation specification signed-off				
1.3		Site guide signed-off				
1.4		Run book/Operations guide signed-off				
1.5		Training documentation complete				
1.6		Work instructions complete				
1.7		Other documents complete				
2. System summary						
No.	Support	Requirement	Comments	Owner	Date	Pass
2.1		Requirements specifications signed-off				
2.2		Network diagram (all components and connectivity) signed-off				
2.3		System overview (Management summary), trouble shooting, Support & Escalation guide, alerting and Management systems guide signed-off				
2.4		Hardware list (including server names, IP addresses, DNS names, network components, disk details, licenses) signed-off				
2.5		Software list (including O/S, databases, versions, licenses), assets register updated signed-off				
2.6		Customer base profile (total users, concurrent users, geography, key times, key contacts) signed-off				
2.7		All testing undertaken and signed-off				
2.7.1		Unit testing complete				
2.7.2		System testing complete				
2.7.3		Reliability testing complete				
2.7.4		Performance testing complete				
2.7.5		User acceptance testing complete				
2.7.6		Load testing complete				
2.7.7		Security testing complete				
2.7.8		Operations testing complete				
2.7.9		Business continuity/disaster recovery testing complete				
2.8		Ownership (service, product/business owners & other key individuals) identified and agreed				
2.9		Is a business continuity plan/disaster recovery plan delivered with this project, or "back out" specified if not?				

TABLE B.2 Operations acceptance checklist (continued)

2.10		FFT (fitness for launch) date defined and agreed with Operations				
2.11		Systems cabinets labeled on the server floor; floor plan updated				
2.12		System test packs complete				
2.13		Operations notified of the change/go-live				
3. Installation						
No.	Support	Requirement	Comments	Owner	Date	Pass
3.1		Installation guide complete and signed-off				
3.2		Security & compliance review complete				
4. Routine operation						
No.	Support	Requirement	Comments	Owner	Date	Pass
4.1		Operations support requirements defined (including third party); support rosters available				
4.2		Timetable and explanation of business-critical scheduled jobs/tasks (including housekeeping)				
4.3		Database recovery procedures specified (including times and data timeliness considerations)				
4.4		Security administration (types of user, access levels, authorizations, meets Operations standards)				
4.5		User administration specified and agreed with Operations				
4.6		Data retention guidelines specified and agreed with Operations				
4.7		Training provided for all relevant groups				
4.8		Maintenance window defined and agreed with Operations				
4.9		System remote access method agreed with Operations				
4.10		Routine (weekly/monthly/yearly) procedures defined and Operations schedules amended				
4.11		Customer alerting processes defined and agreed with Operations				
4.12		Media/tape requirements created and labeled, back up procedures & on-/off-site media storage procedures defined				
4.14		Service monitoring/reporting (who, when, for whom) agreed with Operations				
5. Exception conditions						
No.	Support	Requirement	Comments	Owner	Date	Pass
5.1		All critical processes and dataflows identified				
5.2		All critical processes and dataflows alerted				
5.3		All <i>Critical</i> alerts have actions to be taken				

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6. Capacity planning						
No.	Support	Requirement	Comments	Owner	Date	Pass
6.1		Capacity group engaged and system/platform placed "under watch"				
6.2		System scaling and limits defined				
Signatories		Name	Signature	Date		
		Project manager				
		Test manager				
		Operations manager				
		Other				

^a Y(es), N(o), DMP (Defect Management Plan).

B.19 Metrics Checklist

1. Have you asked the big metrics questions:
 - a. How is the quality of the product to be measured?
 - b. How is the test performance to be measured?
 - c. How is the development process to be measured?
 - d. How is customer satisfaction to be measured?
 - e. How will release readiness be determined?
2. Do you have a set of questions agreed with project management which can be answered by metrication?
3. Do you have a metrics plan to answer these questions?

B.20 Very Wonderful New Approaches Checklist

You will occasionally be asked to adopt some Very Wonderful New Approach. Here are some awkward questions to pose first:

1. Has someone bothered defining a process model of this approach complete with inputs and outputs?
2. What will it cost me to get the inputs?
3. What will the outputs buy me? How many man-days will this save?
4. Who else needs these outputs?
5. How is this better than what I am doing at present?
6. Does this approach have tool support? All of it? How much?
7. Has anyone written a paper on this? Is there a manual?
8. Has anyone ever used this in industry? Are they still in business?

Here are some totally irrelevant answers:

1. X promotes this.
2. I want you to try this.
3. We need to sharpen up our approach.
4. We need more rigor.
5. The CEO/Board wants ...
6. It's a new approach.
7. Haven't you read ... ?