Sponsor’s Proof of Concept Report

Start-up Activity: Phase 0

Preparation date: 1 October 2003

Submitted by: Museum Domain Management Association
Introduction

This report covers activity conducted during Phase 0 of the start-up of the .museum TLD.

Phase 0 was subdivided into the following periods:

Phase 0.1: Familiarization/consultation period.

The following actions were to be conducted during this period:

1. Publicize the .museum TLD within the Sponsored TLD Community.
2. Promote community discussion of proposed naming conventions for the .museum TLD using the MUSEDOMA-DISCUSS e-mail discussion list and hold an initial public presentation at the ICOM General Conference in Barcelona, 1-6 July 2001.
3. Receive expressions of interests from museums and professional associations of museums for the registration of names within the .museum TLD.
4. Announce to the museum community the deadline for expressions of interest that will be included in the initially demonstrated naming convention (NC1).

Phase 0.2: NC1 preparation period.

The following actions were to be conducted during this period:

1. Compile a list of fully qualified domain names that will resolve during NC1. The purpose of NC1 is to demonstrate to the museum community the initial naming conventions and to elicit feedback from the community on how the naming conventions can be enhanced to meet the community's needs.
2. Publish on the MuseDoma Web site a detailed explanation of NC1 and a list of the names to be initially included in NC1.
3. A master name server will be established with the initial NC load, with four slave (secondary) name servers configured to pick up the .museum zone through Notify/AXFR.

Phase 0.3: NC1 demonstration period.

The following actions were to be conducted during this period:

1. Announce the delegation of .museum in the Authoritative Root-Server System to the museum community and elsewhere, as appropriate for initiating the NC1 demonstration period.
2. Promote discussion in the museum community, using the MUSEDOMA-DISCUSS e-mail discussion list and otherwise, concerning evaluation of NC1 and suggestions for a second demonstrated naming convention (NC2).

3. Additional names may be added to the NC1 demonstration based on a rolling basis as expressions of interest are received. During Phase 0.3, the registry function will be performed manually by MuseDoma, as will zone file assembly. The number of Registered Names included in Phase 0.3 may be limited based on workload considerations.

4. Publish on the MuseDoma Web site a detailed explanation of NC2, a description of the adjustments made to NC1 in establishing NC2, and a list of the names to be initially included in NC2.

Phase 0.4: NC2 demonstration period.

The following actions were to be conducted during this period:

1. Phase 0.4 will have elements similar to Phase 0.3, including discussion on the MUSEDOMA-DISCUSS mailing list and otherwise of the merits of NC2 and suggestions for adjustments.

2. If a significant adjustment to NC2 is determined by MuseDoma to be appropriate, MuseDoma may implement demonstration periods (Phases 0.5, etc.) for subsequent naming conventions (NC3, etc.) following similar procedures as for Phase 0.4.

3. If no further adjustment seems necessary or purposeful at the conclusion of Phase 0.3, Phase 0.4 will not be conducted and Phase 0 will be brought to a close.

4. It is anticipated that differences between NC1 and NC2 may be significant, but that subsequent naming conventions will involve diminishing degrees of changes.

Also during Phase 0, the following activities were to occur:

1. Selection and negotiation of registry agreement with Registry Operator.

2. Commencement of ENS Services. These services will involve verifying the eligibility of museums, professional associations of museums, and individual members of the museum profession to register Registered Names within .museum; compiling a list of such institutions; and, once the naming conventions become sufficiently stable, determining the names to be assigned to eligible registrants.

3. Selection of ICANN-Accredited Registrars for Phase 1.
Comments

The timetable for the accomplishment of the listed actions deviated from that prescribed in the Sponsorship Agreement, with some items being completed ahead of schedule and others subject to significant delay. Reporting about this to ICANN was conducted as need arose via e-mail. Since adjustments to Phase 0 required corresponding modification to following periods, the present report is being prepared subsequent to the completion of the entire sequence of start-up phases. The suite of reports in which it is included is structured in the format indicated in the initial description of anticipated activity, regardless of the extent of adjustment to the regimen of start-up action.

Response to questions

The following questions are numbered as indicated in Attachment 18 to the TLD Sponsorship Agreement.

1.1.1. A list of all domain names inserted into the .museum zone during Phase 0.

The date marking the end of Phase 0 was set at 31 March 2002. On 1 April, MuseDoma began the full provision of fee-based ENS Services, thus concluding the demonstration activity. ENS services had been provided from the outset of Phase 0 through to its end date on a cost-free and provisional basis, in support of the demonstration.

The domain names contained in the .museum zone file on 31 March 2002 are listed immediately below. An additional form of each name appeared in the zone file with the prefixed host name “www”:

- aam.association.museum
- aberdeen.art.gallery.museum
- aberdeen.art.museum
- aberdeen.maritime.museum
- acro.virtual.museum
- afp.bonn.museum
- ago.art.museum
- ago.virtual.museum
- aguacaliente.cultural.museum
- aguacaliente.palmsprings.museum
- aic.art.chicago.museum
- aic.art.museum
- aic.chicago.art.museum
- aic.chicago.museum
- ailleurs.science-fiction.museum
- airventure.air.museum
- airventure.aviation.museum
- alcott.house.museum
- alcottthouse.history.museum
ashmolean.archaeology.museum
ashmolean.art.museum
ashmolean.oxford.museum
asianart.sanfrancisco.museum
asmat.art.museum
association.canada.museum
astc.science.museum
astc.sciencecenters.museum
atlanta.high.art.museum
auschwitz.memorial.museum
ayala.art.museum
azjewish.heritage.center.museum
azjewish.historical.society.museum
bagattivalsecchi.house.museum
basque.bilbao.museum
bauhaus.berlin.museum
bayerisches-nationalmuseum.art.museum
bayerisches-nationalmuseum.muenchen.art.museum
beauxarts.montreal.museum
beethoven.bonn.museum
beethoven-haus.bonn.museum
belgium.wallonie.association.museum
belmontbay.science.museum
bergen.education.museum
bergen.educational.museum
bergen.school.museum
bergen.skole.museum
biologiezentrum.linz.museum
bma.art.museum
bolo.computer.museum
boston.science.museum
bovington.tank.museum
branford.railway.museum
branford.trolley.museum
brattonsville.history.museum
british.naturalhistory.museum
brooklyn.art.museum
brooklynmuseum.art.museum
brooklynmuseumofart.art.museum
brookside.history.museum
brunel.london.museum
brussel.natuurwetenschappen.museum
brussels.naturalhistory.museum
brussels.naturalsciences.museum
bruxelles.sciencesnaturelles.museum
cac.art.museum
cac.cincinnati.museum
cac.contemporary.museum
cac.contemporaryart.museum
caf.architecture.museum
california.association.museum
california.science.center.museum
canada.association.museum
canada.virtual.museum
canada.virtuel.museum
canadianmuseums.association.museum
carnegie.art.museum
carnegie.naturalhistory.museum
carnegie.science.center.museum
carolino.augusteum.salzburg.museum
carter.americanart.museum
casino.luxembourg.museum
castle.cornet.guernsey.museum
centerfor.embroidery.museum
centrefor.embroidery.museum
chaddsford.historicalsociety.museum
cheltenham.artgallery.museum
chicago.architecture.museum
chicago.art.museum
chicago.nature.museum
childrens.lincoln.museum
chin.canada.museum
chrysler.art.museum
chrysler.historic.houses.museum
chrysler.norfolk.museum
cincinnati.art.museum
circusworld.circus.museum
civilisation.quebec.museum
civilization.quebec.museum
clark.art.museum
chicagonightout.
cleveland.center.contemporary.art.museum
cleveland.contemporary.art.museum
chicagolightout.
cleveland.contemporaryart.museum
cleveland.health.museum
cleveland.sciencecenter.museum
cloisters.art.museum
cma.association.museum
cmg.glass.museum
colonialwilliamsburg.history.museum
computer.history.museum
computerhistory.cyber.museum
computerhistory.online.museum
computerhistory.virtual.museum
connecticut.fire.museum
connecticut.trolley.museum
contemporary.arts.center.art.museum
contemporary.arts.center.cincinnati.museum
contemporary.arts.center.contemporary.museum
contemporary.arts.center.modern.museum
contemporary.arts.center.museum
greenfieldvillage.history.museum
greenfieldvillage.michigan.museum
greensboro.historical.museum
greensboro.history.museum
gregg.historical.museum
grmuseum.furniture.museum
grmuseum.grandrapids.museum
grmuseum.history.museum
grmuseum.michigan.museum
grmuseum.public.museum
guernsey.heritage.museum
hamburg.labour.museum
hawaii.karate.museum
heathkit.virtual.museum
helleniccosmos.cultural.museum
hemingway-pfeiffer.house.museum
henryford.american.museum
henryford.history.museum
henryford.michigan.museum
henryfordmuseum.history.museum
henryfordmuseum.michigan.museum
heritage.guernsey.museum
heritage.isleofman.museum
heritage.manx.museum
heureka.finland.museum
heurekaHANDSON.museum
heureka.helsinki.museum
heureka.scienece.museum
heureka.sciencecenter.museum
heureka.vantaa.museum
hfmgv.history.museum
hfmgv.michigan.museum
high.art.atlanta.museum
high.museum.of.art.museum
highmuseum.art.museum
hiller.aviation.museum
histoirenaturelle.paris.museum
history.colonialwilliamsburg.museum
history.fortmissoula.museum
history.williamsburg.museum
historyofscience.oxford.museum
hk.art.museum
hk.heritage.museum
hk.science.museum
hnf.computer.museum
hnf.paderborn.museum
hnsa.maritime.museum
hnsa.naval.museum
honolulu.contemporary.museum
honolulu.contemporaryart.museum
mccord.history.museum
mccord.quebec.museum
mcgovern.health.museum
mcgovern.medical.museum
mcny.history.museum
met.art.museum
metropolitan.art.museum
mfk.berlin.museum
mfk.frankfurt.museum
mfk.hamburg.museum
mfk.nuernberg.museum
mhp.moscow.museum
mhp.moscow.russia.museum
mhp.photography.museum
mhs.oxford.museum
mia.minnesota.museum
miami.science.museum
mightyeight.savannahga.museum
milwaukee.art.museum
milwaukee.public.museum
milwaukee.public.naturalhistory.museum
mineralogical.museum.marburg.museum
minneapolis.institute.art.museum
minneapolis.institute.arts.museum
minneapolis.institute.of.art.museum
minneapolis.institute.of.arts.museum
minnesota.childrens.museum
minnesota.institute.art.museum
minnesota.institute.arts.museum
minnesota.science.museum
mma.art.museum
mmfa.montreal.museum
mmk.frankfurt.museum
mmos.science.museum
mnhn.paris.museum
moc.civilwar.museum
moc.history.museum
montreal.beauxarts.museum
montreal.finearts.museum
morris.art.museum
mos.boston.museum
moscow.house.photography.museum
moscowhouse.photography.museum
moscowhouseof.photography.museum
msg.freiburg.museum
mspt.bonn.museum
multimusee.online.museum
musedoma.museum
museeduquebec.art.museum
museeduquebec.canada.museum
museeduquebec.quebec.museum
musees.mulhouse.museum
museescanadiens.association.museum
museum.fuer.kommunikation.berlin.museum
museum.fuer.kommunikation.frankfurt.museum
museum.fuer.kommunikation.hamburg.museum
museum.fuer.kommunikation.nuernberg.museum
museum.of.science.and.industry.chicago.museum
museumassociation.canada.museum
museumofscienceandindustry.chicago.museum
museumssstiftung.post.und.telekommunikation.bonn.museum
museumssstiftung.post.und.telekommunikation.museum
musikmuseet.stockholm.museum
namerequest.nic.museum
naper.settlement.museum
national.building.museum
national.denmark.museum
national.history.denmark.museum
nationalconstitution.center.museum
nationalconstitutioncenter.history.museum
nationalconstitutioncenter.philadelphia.museum
nationalgallery.london.museum
nationalmuseum.denmark.museum
naturalhistory.london.museum
naturalhistory.paris.museum
naturalhistory.sandiego.museum
naturalhistory.santacruz.museum
nature.chicago.museum
naturemuseum.chicago.museum
nc.history.museum
nc.naturalhistory.museum
nc.naturalsciences.museum
ncmls.durham.museum
ncmls.science.museum
nederlands.beeldengeluid.museum
nelson.monmouth.museum
netherlands.national.ethnology.museum
neuesmuseum.art.museum
neuesmuseum.design.museum
neuesmuseum.kunst.museum
neuesmuseum.kunstunddesign.museum
neuesmuseum.nuernberg.museum
neuesmuseum.nuremberg.museum
neuesmuseum.statemuseum.for.artanddesign.museum
newark.art.museum
newark.science.museum
newasianart.sanfrancisco.museum
newhampshire.history.museum
newmuseum.contemporaryart.museum
newport.mansions.museum
saic.chicago.virtual.art.museum
saic.virtual.art.museum
saic.virtual.chicago.museum
saida.history.museum
saintlouis.art.museum
salvadordali.florida.museum
salvadordali.stpetersburg.museum
san.diego.art.museum
sandiego.art.museum
sandiego.naturalhistory.museum
sanjose.children.museum
sanjose.discovery.museum
santarbarbara.art.museum
saratoga.history.museum
sbma.art.museum
schulz.cartoonart.museum
schweiz.freiburg.museum
science.boston.museum
science.cranbrook.museum
science.minnesota.museum
scienceandindustry.manchester.museum
scienceplace.dallas.museum
secretariat.icom.museum
sf.maritime.museum
shedd.aquarium.museum
shedd.aquarium.chicago.museum
shenandoahgermanic.heritage.museum
siliconvalley.art.virtual.museum
siliconvalley.computerhistory.museum
smca.salzburg.museum
southernappalachia.railway.museum
southernoregon.history.museum
spaceandrocketcenter.alabama.museum
speed.art.museum
stamford.museum.and.nature.center.museum
steamboatera.chesapeakebay.museum
sternberg.naturalhistory.museum
stlouis.art.museum
stmaryscity.colonial.history.museum
stmaryscity.history.maryland.museum
stmaryscity.history.museum
stockbridge.normanrockwell.museum
stockholm.music.museum
stockholm.science.museum
stockholm.sciencecenter.museum
stockholm.technology.museum
stpете.finearts.museum
stpetersburg.dali.museum
stpetersburg.salvadordali.museum
strong.museum.handson.museum
1.1.2 A summary of expressions of interest from museums and professional associations for registration of domain names during Phase 0 for the geographical regions of (a) Africa, (b) Asia Pacific, (c) Europe, (d) Latin America/Caribbean, and (e) North America.

The largest segments of the professional museum community, as they might be expected to manifest early interest in .museum, are centered in Europe (where the International Council of Museums has over 70% of its membership) and North
America (as the point of origin of all activity based on the DNS). The active discussion during Phase 0 was largely conducted by participants in these two regions, although significant commentary was received from Asian-Pacific countries.

1.1.3 A summary of sTLD Community comments concerning evaluation of NC1.

The key issue being considered during NC1 was community response to the proposed control over the second level of the .museum name space. The baseline assumption was that museums would respond favorably to the restriction of widely used generic terms, that are descriptive of areas of disciplinary specialization and of physical location. Terms such as “art.museum” and “paris.museum” would be available as second-level labels for the shared use of museums that might wish to appear in them on the third level, but no such two-label names would be delegated exclusively to any individual museum. A useful consequence of this structure was that it supported the facility that currently appears at http://index.museum/. A second baseline assumption was that confusion about the restriction of generic terms would be minimized if a three-label structure were uniformly applied to all names held by individual museums.

The resulting Mark 0 naming conventions were the subject of extended discussion but there was clear consensus support for the intended utility. As might be expected, museums holding names in ccTLDs that did not delegate second-level names found nothing at all unusual in the proposed .museum naming conventions, whereas museums holding names in totally unrestricted gTLDs were more likely to question the control being set in .museum.

1.1.4 A report summarizing the effectiveness of the NC1 and NC2 evaluation periods.

There was no fixed prescriptive list of generic terms that would be reserved for shared use on the second level. One of the purposes of the uniform use of three-label names was to generate a second-level vocabulary that was a direct expression of museum community perceptions of the terms that it might most usefully contain. Names being suggested at the outset of NC1 often reflected unfamiliarity with the intent of the exercise. In order to encourage convergence, the entire body of requested names was kept on-line for reference, as successive requests were prepared. When the flat text listing of these names was replaced by the structured index, the intended result was rapidly attained and the vocabulary that remains visible at http://index.museum repeatedly demonstrated its value. Given that no larger purpose was foreseen during NC1 and NC2, the action conducted during their course can be seen as purposeful and effective.

1.1.5 A summary of sTLD Community comments concerning evaluations of NC2.

Community commentary focused on two main points. Although it was generally agreed that the index was an extremely useful facility, there were expressions of disinterest in it if its maintenance made it impossible to acquire two-label names. The most frequently stated reason for this position was that a second-level designation that
had been well branded in another TLD, often at considerable expense, ought to be freely transportable to .museum. The most frequently voiced counterargument was that a name in .museum could readily be used as an adjunct to a pre-existing name and that the purpose of the new sTLD was not simply to duplicate names already registered in other domains.

The other point of visible differing opinion related to the position of born digital activity in .museum. The naming convention:

“Entities that conduct qualifying activity in born-digital contexts but do not operate physical museums, register in the generic second-level domain virtual.museum or in an unambiguous equivalent, such as digital.museum, online.museum or cyber.museum. Physical museums that also operate digital museums may also register in these second-level domains.”

was seen as discriminatory by many digital-only museums, and as unacceptably liberal by many members of the brick-and-mortar museum establishment.

1.1.6 A description of the effectiveness of the .museum email discussion list.

The e-mail discussion list was (and remains) an absolutely essential instrument in determining community response to proposed action relating to .museum. It has proven similarly invaluable as a channel for unsolicited input into the policy development process.

1.1.7 A description of significant technical difficulties encountered during Phase 0.

The infrastructure needed to support a small and highly specialized sTLD does not immediately appear to have unique technical components. Establishing and maintaining the policy basis for such a domain may, however, have requirements that are not supported on the traditional service platform. A highly specialized homogeneous registrant base may also have needs that lack counterpart in the provision chain in an unrestricted environment. There are alternate ways to apportion the underlying concerns in administrative and technical regard. For the purposes of this report, no distinction will be made between the two components of the matter that will now be described.

It became clear from the outset of ENS service that implementing effective contact between the registrant base and the technical platform in as particular a situation as that pertaining to .museum, would involve considerations that are not traditional attributes of the processing of registration. The demonstration registry developed and operated by MuseDoma therefore included support of ENS functionality that was necessary in the full production situation but could not readily be migrated to an independent registry system operator. This gave rise to significant delay in the conclusion of arrangements for back-end service.
The dialog between MuseDoma and the .museum target community was productive from the outset. Although not invariably free from contention, the discussion all but continually served the development of the domain in the best interests of the museum community. This would not have been the case if MuseDoma had not itself been so firmly based in that community. The particular requirements of .museum registrants needed to be articulated in the call for expressions of interest in serving .museum that was sent to the ICANN accredited registrars during Phase 0. Here, as well, there were significant delays before all requisite agreements had been completed.

The resulting technical and administrative complications will be further described in subsequent Proof of Concept reports.